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Can We Talk About Climate Change? Towards a Transformative Model of Adult Climate Change Education

Audrey Hayes

61148661

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Supervisor: Dr Michael Murray

Student Declaration

The material presented here for examination for the award of a higher degree by research has not been incorporated into a submission for another degree

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I am the author of this thesis, and the work described therein was carried out by myself personally.

SIGNED: Audrey Hayes DATE: 30.06.2025

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ABSTRACT

This thesis examines the role of adult climate change education in Ireland through the lens of critical pedagogy and Ecological Marxism. Drawing on the work of Gramsci and Freire, this exploration examines pathways for education to move beyond individualistic approaches. It argues for education that nurtures critical thinking, ultimately leading to collective action. The research was conducted using semi-structured interviews with climate educators and activists to produce qualitative data for analysis. The findings revealed that dominant educational narratives frequently reinforce neoliberal ideologies. Despite the barriers, there are efforts to create dialogical adult learning spaces where the links between climate change and broad issues of justice, power and resistance can be explored. This thesis argues that a transformative approach to climate education can empower adults to critically engage with systemic drivers of environmental devastation. Climate change education must be reorientated towards a praxis of hope, which harnesses learners' lived knowledge so that education becomes a tool for change.

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CHAPTER 1

INTRODUCTION

My father always said that if I cared as much about people as I do about animals, the world would be a better place. I do care about people – generally those who are underdogs or marginalised. But my father was right in some ways – animals hold a special place in my heart. Watching walruses plunging to their death on David Attenborough's Our Planet had a lasting impact. Early melting sea ice forces walruses to cram onto a small island in Northeast Russia. To escape the crowded beaches, they climb the cliffs, which is unnatural behaviour. Bad eyesight does not allow them to navigate a safe route down, but they know other walruses are below, so they venture over the precipice. Their broken bodies pile up on the water's edge, and they die lingering deaths.

During the COVID-19 lockdown, I volunteered at a Wildlife Hospital, where I hand-raised orphaned or injured Irish wildlife until they became self-sufficient. What surprised me the most was the level of public involvement. Confined to their local areas, people took more notice of the natural world. It gave me hope for a world where humans and nature can coexist.

Recently, I realised I have a condition called aphantasia. If I see something, I can describe it in great detail, but I cannot see an image in my mind; the projector in my head is broken. This makes it hard to visualise the future impacts of rising sea levels and melting glaciers. Yet, I can contemplate a world without animals, and it is not a place I want to live in or leave to the next generation. We are experiencing what has been referred to as the sixth mass extinction event, stemming from human exploitation of the planet, including human-driven climate change (CC). Perhaps my research can uncover what constitutes effective Climate Change Education (CCE) for adults. If CC is reframed as a social justice issue, it might kickstart a movement to enact real change. My love of animals may help people after all.

1.1 Introduction

UNESCO describes education as vital to climate action, empowering people through knowledge and skills. Under the United Nations Framework Convention on Climate Change (UNFCCC) and Paris Agreement[1], governments must 'educate, empower and engage all

[1] The Paris Agreement was signed by 194 parties, including the EU, at COP 21. It is a legally binding agreement with an inbuilt framework for monitoring and reporting climate goals.

stakeholders' (UNESCO, 2025). In Ireland, CCE is under the remit of Education for Sustainable Development (ESD) and is incorporated into Ireland's Education for Sustainable Development to 2030 strategy (Government of Ireland, 2021). Climate Action short courses are offered for Junior Cycle, and a new Leaving Certificate subject, Climate Action and Sustainable Development, was recently introduced. Both programmes enable young people to make connections between what is happening to the planet and issues of climate justice.

Similar strategies should be adopted in adult, community, and further education to develop future CCE programmes. There is a need to provide a deeper understanding of the origins of CC and to encourage mitigation strategies beyond behaviour modification, such as reducing, reusing and recycling. People need access to CCE that empowers them to have agency in the climate debate. They should not feel blamed, but must feel they are making valid choices within their personal circumstances. This exploratory piece of work draws on literature and the opinions of individuals engaged in developing or delivering CCE for adults to gain insight into what might constitute effective CCE.

1.2 Climate Change

While weather changes on a daily or even hourly basis, CC refers to long-term shifts in weather patterns and temperatures. Human-induced CC has been described as the most significant threat not only to the environment, but also to societies. It is underscored by violations of human rights in the most vulnerable communities. Inequality and injustice are manifested through inaction and the shirking of responsibilities by stronger economies and major corporations (Fry, 2022). The Holocene refers to the period when the Earth was in a relatively stable state, which lasted for approximately twelve thousand years. We are now said to be in the Anthropocene era, although there is debate as to whether this started in the 17th Century or the 1950s.

In geological terms, Anthropocene is used to describe the epoch in which human behaviour is the dominant impact on the environment and the climate. By designating this the Anthropocene, it could suggest that all people contribute equally to CC, but this is incorrect. Between 1990 and 2019, it was estimated that the bottom 50% of the population contributed just 16% to emissions growth, while the top 1% contributed 23%. This gap exists both between and within countries, with significantly more emissions attributed to higher-income groups (Chancel, 2022).

1.3 Current Adult Climate Change Education in Ireland

At policy level in Ireland, CCE is incorporated into Education for Sustainable Development (ESD). We are currently on our second ESD plan, which runs to 2030, and describes education as a lifelong process that empowers people to situate their choices within wider national and global society. However, the Green Skills Programme launched by Solas[2] in October 2024 does not include courses specifically targeting CC or climate justice. The focus is on equipping individuals with the skills necessary to secure employment in green transition industries. While these skills are needed, the scope of the Green Skills programme could be wider.

Using the terms climate and sustainability to search FETCH[3] produces a list of 70 courses available across multiple Education and Training Boards (ETB)[4]. The majority of these courses focus on individual actions, like how to recycle or save energy at home. Only 15 of these courses appear to link CC to issues of inequality and justice. There are several courses offered at third level, but the majority are postgraduate courses, meaning applicants must hold a primary degree to be considered for a place.

1.4 Purpose of the Study

The purpose of this study is to answer the question: ***'How can effective, relatable climate change education for adults be developed?'*** To answer this question, I adopt a critical pedagogical lens, grounded in Gramscian, Freirean, and eco-Marxist thought.

As someone passionate about the environment and the natural world, the current lack of progress on limiting and mitigating CC makes me anxious. The Paris Agreement was signed in 2015. In 2025, only 15 countries, less than 8% of the 194 parties to the agreement, met their emission reduction targets. Reporting is required every 5 years, and if countries consistently fail to meet their targets, we cannot hope to curb global warming at 2 °C above pre-industrial levels, never mind 1.5 °C. Ireland missed the 2025 deadline to submit its Nationally Determined Contributions (NDCs).

As an Adult Educator working within the ETB system, I noticed a lack of accountability around sustainability measures in the organisation and a deficit of education around larger CC issues. As an Irish citizen, I know that the issue of CC can divide people and communities.

[2] Solas is the Irish state agency responsible for overseeing Further Education and Training (FET)
[3] FETCH is the Further Education and Training Courses Hub website, which lists courses available in ETBs
[4] There are 16 ETBs, which are statutory local education delivering a wide range of education services

Specific sectors of society feel they are disproportionately blamed for emissions. Some socio-economic groups believe they cannot afford the changes necessary to combat CC, such as installing solar panels or home energy upgrades. This can lead to feelings of inadequacy, lethargy and an unwillingness to participate in climate debates, making the process exclusionary.

Education and Climate Action are both on the list of Sustainable Development Goals (SDGs), which underpin the UN 2030 Agenda for Sustainable Development. Goal 4 – Education aims to promote inclusive, equitable, quality education through principles of lifelong learning. Goal 13 – Climate Action advises that transformation is needed across all industries and societies (UN Department of Economic and Social Affairs, 2025). However, if I search online for the importance of education in mitigating CC, I am generally given a list of sites focused on CCE and young people. If CC is everyone's responsibility, then adults should have the same access to quality education as young people.

I undertook this research to explore current CCE provision for adults, the values it promotes and who it benefits. By interviewing people involved in developing and delivering CCE, I sought to gain a deeper understanding of what future courses in the adult, community and further education space might look like.

1.5 Scope and Significance of the Research

This exploratory research was conducted as part of my Master's thesis in Adult Education and was limited in time to one academic year; therefore, the pool of people I could interview was necessarily small. With more time, the participant group could have been expanded.

Throughout this thesis, the following arguments are made in relation/ to my research question. CC is real and needs a radical response; perceptions of CC are socially constructed; the political and educational response to adult CCE is inadequate; capitalism is the primary driver of CC; current adult CCE is too individualistic and does not foster critical thinking; an intersectional, community-based, learner-centred approach to adult CCE is required.

I have drawn on two of the most influential thinkers in the field of critical education, Antonio Gramsci and Paulo Freire. Gramsci, an Italian Marxist, introduced the concept of Hegemony, which argued that the ruling classes maintain power by shaping cultural norms to make them appear natural. It posited the idea of organic intellectuals, who emerge from

subordinate classes to challenge cultural norms. In Gramsci's theory, education is a key site for reinforcing cultural norms, but it can also be a site for resistance and struggle (Mayo, 1999).

Freire, a Brazilian philosopher and educator, proposed similar ideas but with a focus on pedagogy. He advocated for a participatory, dialogical approach with learners encouraged to question, reflect and act. Conscientização, or critical consciousness — the process by which individuals become aware of social injustice — is central to Freire's philosophy (Freire, 1970).

Gramsci's hegemony is crucial in understanding how the dominant narratives of consumerism and economic growth shape public perceptions of CC. These ideologies are embedded in media, policy and everyday life and can obscure the true causes of environmental degradation that has led to CC. These ideologies are replicated in adult education settings. Adult CCE that allows people to recognise that dominant ideologies are not the only view can nurture organic intellectuals in the form of community members who can articulate instances of climate injustice and mobilise others to take action. Freire's critical consciousness can complement this by encouraging adults to move beyond a passive type of learning about CC. When combined, they offer a concept of CCE that empowers adults to challenge systems, visualise alternatives and take collective action (Schugurensky, 2000).

Ecological Marxism (eco-Marxism) applies Marxist analysis to the unsustainable exploitation of the natural world. It emphasises Marx's Metabolic Rift, the disrupted relationship between humans and nature resulting from capitalist modes of production, which have led to environmental destruction (Humphrey, 2002).

Eco-Marxism is a critical lens for examining the intersection of environmental issues, labour, class and social justice. It can encourage learners and educators to move away from individualism and nurture a collective critical consciousness about the structural causes of the climate crisis. This closely aligns with Freire's philosophy as mentioned above. The term ecopedagogy has recently been coined to describe environmental education rooted in critical pedagogy. Ecopedagogy can instil a sense of responsibility for and engagement with the natural world for adult learners. This type of education goes beyond technical solutions and promotes a critical examination of socio-economic systems that drive CC. Successful engagement with ecopedagogy would lead to transformative collective action (Strajn, 2025).

1.6 Synopsis

Chapter One gives a brief overview of this thesis, which seeks to answer the question 'How do we develop effective, relatable CCE for adults?' It provides a concise background to

CC and the current CC educational response within the adult, community and further education sector. It enunciates the reasoning behind this research, its scope and significance and the theorists who inform my analysis of the research findings.

Chapter Two extensively examines academic literature, reports, government publications and articles from Ireland, Europe and the rest of the world. It builds a picture of the climate crisis, the policies that address this, and the educational response to CC. The future of CCE is examined to determine what that might look like.

Chapter Three provides insight into the ontological and epistemological approach of social constructionism that I have adopted to inform my research. It describes the qualitative method of semi-structured interviews that I utilised to conduct my research and explains why this was the best approach to answer my research question.

Chapter Four presents the findings from participants' responses in the semi-structured interviews I conducted. The various themes that emerged from these interviews are set out for the reader. The findings are then analysed using the theories that formed part of the literature review.

Chapter Five discusses the analysis of my findings, proposes recommendations for future CCE and draws conclusions based on the research conducted in writing this thesis.

CHAPTER 2

LITERATURE REVIEW

As I began to write my thesis, a General Election had been called in Ireland. We were bombarded with leaflets beseeching us to vote for different candidates. Only two of these leaflets mentioned CC, one from the Green Party[5]*candidate and one belonging to the Social Democrats*[6]*. When I engaged with a representative of a government party about CC, they informed me that they were signed up for x, y, and z. I pointed out that they may be signed up to different agreements, but the country is not meeting its targets, and they agreed, engaging in a frank discussion. Their companion, a secondary school teacher, spoke of the new Leaving Certificate course but appeared shocked that I was suggesting adults needed CCE, too. An opposition party rep told me they are very committed to 'that' when I mentioned CC. I do not know exactly what 'that' is, and they looked slightly bewildered by my question. This laissez-faire attitude seems to be reflected in the general population of Ireland. A poll by the Irish Mirror found that only 2% of people surveyed listed the environment as the most critical issue to them in the run-up to the election* (Irish Mirror, 2024).

In previous elections, every party devoted a sizable amount of its campaign strategy to CC; yet, in 2024, the issue appears to have lost ground. This is despite all parties dedicating a substantial proportion of their manifestos to the subject. Although improvements have been made in Ireland's carbon emissions, they do not sufficiently combat the overloading of the atmosphere with greenhouse gases (FitzGerald, 2024). As negotiations occurred at the Conference of the Parties (COP) 29, top scientists questioned Ireland's political commitment to offsetting CO2 (O'Doherty, 2024). The former Minister for Climate Eamon Ryan has stated that, on an international level, political interest in the climate crisis fluctuates. This year, political interest has waned due to conflicts and other pressing global events (O'Sullivan, 2024).

[5] The Green Party was founded as the Ecology Party of Ireland in 1981, became the Green Alliance in 1983 and adopted its current title in 1987. Following the 2024 General Election, the party holds only one seat in the Dáil (Irish Parliament).

[6] The Social Democrat Party was founded in 2015 in Ireland and is described as a centre-right party. It secured 11 seats in the 2024 General Election and one of the party's stated election aims was to reach Irish climate targets.

2.1 Introduction

This chapter draws on current books, journal articles, Irish government publications and EU policies to understand the political stance on CC in Ireland. As CC continues to unfold, I have also included commentary from relevant newspaper articles and websites up to and including 31st May 2025. Journal articles, government policy, the further education curriculum, and the Solas FET Green Skills Programme were perused in an exploration of current adult CCE provision. A critique of adult CCE is offered through the work of Antonio Gramsci and Hegemonic theory. The tepid response to CC is surveyed through the lens of Eco Marxism. Finally, Freirean ideology is consulted in an attempt to answer my research question, ***'How can effective, relatable climate change education for adults be developed?'***

2.2 Background to the Climate Crisis

In the early 19th Century, Joseph Fourier understood that the Earth's atmosphere retained some heat from radiation while allowing some to escape, thus regulating the surface temperature (Fleming, 1999). In 1859, John Tyndall, an Irish-born physicist, set out to test the prevailing scientific consensus that all gases were transparent. This proved true of nitrogen and oxygen, but he discovered that the gas from his coal-powered jet was opaque. The notion that CO2 trapped heat was born (Barton, 2024; Jackson, 2020; Weart, 2008).

Investigations by Swedish scientists in the late 19th Century predicted that if we continued burning fossil fuels at the current rate, the Earth's temperature could rise by 5 or 6 degrees. His peers disagreed, unable to reproduce such results with the methods available to them. Some believed carbon dioxide could not accumulate in the atmosphere as the ocean acted as a giant sink. They referred to the 'Balance of Nature', probably determined by God, and rejected the idea that humans could have an impact on such fundamental truths. Any changes that occurred were random and localised, and would likely revert over time. Because changes in the natural world were slow and imperceptible, they were non-existent and of no concern (Weart, 2008).

In 1938, the Royal Meteorological Society in London was advised by amateur climatologist Guy Stewart Callendar that the discharge of vast amounts of CO2 was changing the environment. Arguments among the scientific community ensued, which are beyond the scope of this thesis. However, in the late 1980s, global warming stepped firmly into the spotlight. An article in The Times acknowledged 1988 as the warmest year since records began, with international scientists declaring the planet was warming faster in the 1980s than in the

previous decade (Shabecoff, 1988). Environmental groups, lacking financial resources but rich in passion, took on corporations and individuals who controlled vast sums and resisted any attempts at regulation. The Intergovernmental Panel on Climate Change (IPCC) was formed, but could not accept as fact what the models predicted. It was not until 2001 that it acknowledged a major global warming event was underway (Weart, 2024). The IPCC Third Assessment Report of 2021 emphasised CC effects and the need to adjust to the changes wrought by a warming planet (IPCC, 2025).

Although political commitment to CC may have stagnated, the crisis has not abated. The Earth is reaching environmental tipping points faster than previously thought, beyond which the planet will likely undergo irreversible changes. Sea ice in North America and Greenland is melting at higher-than-expected rates, and important ocean currents, including the Gulf Stream, are slowing down. This will have a direct impact on the climate in Ireland, resulting in overall temperature drops. These tipping points are unlikely to be reached in isolation, with reports suggesting a cascade effect where one event will trigger another (Nusche, Fuster Rabella, & Lauterbach, 2024).

To date, 2024 was the warmest year globally since records began. Heatwaves, floods and storms beset the year. The global temperature reached 1.5°C above preindustrial times for the first time (United Nations, 2025). In 2021, Sir David Attenborough, the renowned naturalist, advised the attendees at the UN Security Council meeting that CC poses a threat to security, unlike anything seen before. He stated there is currently more carbon dioxide in the atmosphere than there has been for millions of years and implored governments to address the issue proactively. At the same meeting, the Secretary General of the UN, António Guterres, described adverse weather events brought on by CC as a threat not only to the environment but to political, social and economic processes (Security Council, 2021).

Since the acknowledgement of CC, there has been a distinct link between the Industrial Revolution, increased carbon emissions and our changing world. However, recent research highlights the connection between colonisation and CC, referencing both imperialist colonialism and ongoing ecological colonialism (Mercer & Simpson, 2023; Mahony & Endfield, 2018; Reibold, 2023). Regardless of the starting point, inequality is an inherent part of CC, with those producing the least emissions often suffering the worst consequences. Global policies, proposed since the inaugural COP in 1995, have failed to address this issue adequately.

2.3 Climate Change Politics

Following a complicated ratification process, the Kyoto Protocol finally came into effect on 16th February 2005. It operationalised the United Nations Framework on Climate Change (UNFCCC), proposed in 1994. There was an acknowledgement that nations producing the most Greenhouse Gas emissions should be held accountable for offsetting these pollutants. It signalled a change in attitudes to CC, moving it into the political and economic spheres and inviting challenges from the fossil fuel industry (Murray, 2021).

Ireland is dubbed the Emerald Isle, but its green credentials are not what they could or should be. The goals of the Paris Agreement to reduce greenhouse gas emissions by 51% by 2030 and to reach net zero by 2050 will not be met on our current trajectory (Slevin & Barry, 2024). A recent study, commissioned by the Irish Environmental Protection Agency, found that most people were aware of CC and the associated risks. However, many people view the climate crisis as a distant threat to people in faraway countries and do not necessarily equate it with human activity. The research found that only 34% of the Irish population sees CC as an actual, pressing threat (Marlon, et al., 2023).

According to the UNFCCC, public awareness of CC must be raised through education and access to information (UN, 2020). Sustainability and CCE fall under Global Citizenship Education (GCE). The notion of Global Citizenship is not a new one, and its principles have been adapted over the years as globalisation increases; however, they ultimately recognise the rights to dignity and equality for all human beings.

Global Citizenship played a key role in the adoption of the seventeen UN Sustainable Development Goals (SDGs), which are at the heart of the 2015 Paris Agreement on CC. Global Citizenship exists in many forms and was the impetus for the 2030 Agenda for Sustainable Development (Bachelet, 2018). It appears to put the onus for everything from human rights to human security onto the individual rather than nation-states. According to Pallas (2012), both the Canadian Environment Department and the UN Environment Programme highlight the role of the individual in protecting the environment. Scotland's International Development Alliance (2024) advises that every global citizen has a responsibility to the planet.

The 2030 Agenda for Sustainable Development envisions a world of sustained economic growth that utilises all natural resources sustainably, while protecting biodiversity and fostering a harmonious relationship between humans and nature (UN, 2015). It is perhaps telling that economic growth is the driving force behind policies allegedly centred on making our planet a better place for all human and non-human inhabitants. Irish neoliberal, growth-

oriented policies have had a minimal effect on overall emissions. Progressive policies have focused on reducing demand rather than curbing supply (Slevin & Barry, 2024).

The Climate Action SDG acknowledges that we are fast approaching Earth's tipping point and that all nations must act to halt these actions. However, the annual Sustainable Development Report indicates that while many countries in Africa have met their targets, in Ireland and much of Europe, significant challenges persist. In the category of quality education, challenges persist in Ireland (Sachs, Lafortune, & Fuller, 2024). Resources and programmes are available to schools under the School Sector Climate Action Mandate (Department of Education, 2024). No such plan exists for the Adult, Community and Further Education sector.

2.4 Current Climate Change Education Provision

In April 2021, the Irish government published a Consultation Paper on Ireland's Education for Sustainable Development Strategy to 2030 (Government of Ireland, 2021). The aims of the paper were threefold, including identifying the key achievements of the first Education for Sustainable Development (ESD) Plan from 2014 - 2020. In this paper, ESD is described as empowering people to create a sustainable future. ESD is envisioned as a lifelong learning process that enables individuals to understand the world and situate themselves and their actions within the broader context of society, both locally and globally.

The consultation paper acknowledges positive progress in ESD in primary, secondary and third-level institutions. In the achievements section of this consultation paper, the increased availability of third-level courses incorporating ESD is noted, but no progress is indicated for Further Education. However, the achievements section of the Second National Strategy on Education for Sustainable Development reports an increase in ESD programmes in FET (Government of Ireland, 2022a). It appears our government is inconsistent about the implementation of ESD in the Further Education Sector.

Solas, the Irish state agency responsible for Further Education and Training (FET), launched its Green Skills programme in October 2024. This FET 'green transition' strategy proposes to shape Further Education's response to realising Ireland's climate action targets. Solas acknowledges that humans negatively impact the environment and highlights the vital role FET plays in responding to CC (Solas, 2024). The Green Skills Programme was developed in partnership with accounting organisation KPMG, whose remit is business expansion (KPMG, 2025). Key industry stakeholders, public bodies, the Education and Training Boards (ETBs) and government departments were consulted. The strategy aims to produce skilled

workers for the green transition in crucial sectors. Green Skills 2030 attempts to fulfil the FET's obligations under national and EU directives (Solas, 2024).

To determine what CC related courses are being offered at QQI Levels 1-6, I conducted an online search of FETCH.ie, the Further Education and Training Course Hub. FETCH is an online site that lists all available courses. By creating an account, learners can express an interest in securing a place on courses offered in their preferred area. Using the terms 'sustainability' and 'climate' individually, I searched the FETCH site. Combining the terms' sustainability' and 'CC' together produced a list that included courses irrelevant to either subject. Contracting CC to climate gave a more accurate result. I copied the results of both relevant searches into an Excel document and produced a list of 70 courses offered across the various ETBs. Upon examining the module descriptions, the majority of the courses are centred on individual behaviour changes to increase sustainability in businesses and at home. Approximately 15 courses do more than advise people to reduce, reuse, recycle, change their lightbulbs or plant some vegetables. Fifteen courses recognising CC should be tackled by more than individual actions. As CCE may fall under the remit of other subjects, I entered the terms' International Development' and 'Global Citizenship Education' into FETCH.ie but got no listings.

To determine if the Higher Education sector has adopted a broader stance on CCE, I searched for 'climate' on Qualifax.ie[7]. Approximately 15 of the 23 courses listed included content acknowledging the intersectionality of the subject. A search for Global Citizenship Education and International Development revealed 8 more courses to include on my list. Of these 24 courses, only three are listed as lifelong learning, with the rest offered as graduate/postgraduate courses.

2.5 Individual Action vs Systems Change

While some corporations, industries, and governments have attempted to shift the responsibility for CC onto the individual, communities and academics increasingly strive to have CC recognised as a collective issue. Collective action can be described as groups working together to accomplish a common objective (Ardoin & Bowers, 2025). Shifts in behaviour are needed to mitigate the effects of CC, but pathways to these changes need to be made clearer to the general population (Nusche, Fuster Rabella, & Lauterbach, 2024).

[7] This site is described as a one-stop shop for learners, providing comprehensive information on Further and Higher Education and Training Courses.

On an individual basis, large-scale uptake of high-impact actions is required to enact widespread changes in the way we interact with our environment. Actions like recycling or switching to energy-efficient light bulbs receive much attention. At the same time, educational programs often overlook higher-impact actions, such as reducing air travel or going car-free, because they are more controversial. Individual actions may have some impact, but people need to be encouraged to situate their choices within broader, complex societal factors. Instead of focusing on small, behavioural changes, the emphasis must be on adapting our ways of thinking. There is also a need to meet students where they are and to be aware of socioeconomic factors that may limit their view of CC or their propensity to care about it (Nusche, Fuster Rabella, & Lauterbach, 2024).

Debate surrounds the need for individual versus collective action in mitigating the impacts of CC. Individual action and systemic or structural change do not have to be mutually exclusive, and it is not always necessary to choose between the two. Those in favour of societal structural changes may dismiss personal choices in the fight against CC, drawing on historic debates around the influence of agency over structure. It can be argued that either/or thinking is counterproductive, and any effective strategy should target both individual action and systems change (Brownstein, Kelly, & Madva, 2022).

While a wholly individual concept places the burden of change on people's choices rather than the underlying systems, individualism can play a role in universal action. Cultural norms, personal circumstances and lived experience shape individual values. These values may determine how a person reacts to societal problems and may engender pro-social behaviour as opposed to a selfish type of individualism. Individual support for climate-positive actions may lead to collective action that benefits the planet (Ardoin & Bowers, 2025).

The breadth of CC issues necessitates a multidisciplinary approach across all levels and structures of society, from collaborative policymaking to community groups working on local initiatives (Ardoin & Bowers, 2025). Collective social movements may not have the power to write policies. However, they can influence policy reforms, promote cultural shifts and lobby for institutional change, especially in times of crisis such as the recent pandemic or the looming climate catastrophe (Piccolo, 2025). It may be hard for social movements to flourish and collective action to be fostered in an educational system controlled by capitalism, where education reproduces class structures and primarily prepares learners for future employment, restricting access to quality education for certain socio-economic groups (Bowles & Gintis, 2002).

Althusser (1971) posits that capitalism is reproduced through education because it indoctrinates learners in the dominant ideology and norms. Education in capitalist societies rewards individualism, competition and submission. In Ireland, this is evident in a system where individual academic achievement, especially in important examinations like the Leaving Certificate, which rewards personal performance over collaborative learning, is celebrated. Educational success is usually framed in terms of personal effort, disregarding and obscuring structural inequalities and unequal access to quality education, while reinforcing neoliberal ideas of self-reliance and the notion that hard work is all that is needed to succeed (Harford, Fleming, & Hyland, 2024)

2.6 Capitalism and Climate Change

It is widely accepted amongst the natural science community that changes to the Earth's climate over the past century are mainly due to human activities that release greenhouse gases. This may be why current education programmes are rooted in the science behind CC and technological solutions to offset the carbon we use. What may draw less attention is the correlation between capitalism and CC (Clark & York, 2005). While the natural sciences have studied and brought CC to the fore, perhaps it is the social sciences that must address the social structures that drive global warming. It can be argued that we need a new way of framing the problem of CC (Holm & Travis, 2017). To understand the current CCE response in adult, community and further education, it is necessary to understand the economic structures that underpin Irish society.

Much attention is focused on finding solutions through new technologies and innovations that will continue to work within existing economic practices. Activists and climate protesters carry signs imploring 'systems change, not climate change', at well-attended rallies calling for a shift in the economic system to avoid climate catastrophe (Beer, 2022). However, this phrase is often ignored or, more cynically, appropriated to mean something different. In de Connick's (2022) inaugural speech at Eindhoven University of Technology, she thanked the protesters for providing the name for her speech. She then changed it to systems transitions and applied the concept to changes in the energy system, the land and ecosystem, the urban and infrastructure system and the industrial system.

Values and experiences shape perceptions of CC, and cultural understandings of CC are influenced by the methods of production and consumption, which generate emissions and thereby contribute to the problem. This challenges climate responses, as people tend to dismiss

ideas that challenge their behaviours (Price, Walker, & Boschetti, 2014). In Ireland, we live in a capitalist society where people are encouraged to consume. A workable solution to CC must radically reduce the extraction, processing and consumption of the Earth's natural resources. However, capitalism, as it currently exists, is incapable of regulating itself, curtailing unsustainable growth and halting CC (Park, 2015).

In a bid to shape US cultural perceptions, oil and gas companies have invested in education and donated to political campaigns. Only 22% of Republican supporters believe that human activity drives CC (Funk & Kennedy, 2016), a worrying statistic when there is currently a Republican president at the helm of the largest cumulative producer of CO_2. Funding has been withdrawn from climate health (Calma, 2025) and environmental justice programmes (Rodriguez Velazquez, 2025). Trump has signed orders to leave the Paris Agreement and to increase fossil fuel production (Walling, 2025). Emboldened by this, oil companies have reneged on commitments to renewable energy while increasing fossil fuel production (Root, 2025). These are the organisations that drive CC, while often denying its existence. Purporting to go green by investing in renewable energy, Shell simultaneously invested four times more in oil and gas than clean energy, while BP allocated more than seven times as much to fossil fuel production (Bindman, 2024).

This greenwashing allows the big fossil fuel extractors to wear a cloak of greenness, but underneath, they have not changed. According to Greenpeace, ethical business is on the rise and was worth £122 billion to the UK market in 2020. Some companies will make their goods appear more environmentally friendly, whilst there is no significant reduction in their ecological impact (Das, 2022). Irish Airline Ryanair maintains it is doing great work in reducing the CO_2 emissions per passenger from 67g to 66g. It appears emissions are moving in the right direction until the company announces it is the first European airline to fly 200 million passengers in one year, a 9% increase over the previous twelve months (Ferriter, 2025).

Ireland is predicted to reduce Greenhouse Gas emissions by 29% by 2030, far short of the 51% target (Environmental Protection Agency, 2024). This is no surprise, as Ireland is ranked 11th out of the 14 EU nations in the environment category, performing inadequately on several fronts, including CC and responsible consumption and production (Social Justice Ireland, 2025). On economic performance, however, in 2023, Ireland ranked first in the individual standings of the IMD World Competitiveness Ranking, a rating welcomed by the Industrial Development Authority (IDA), which attributed it to our pro-business outlook (O'Brien, 2023). The Enterprise Ireland strategy 2025-2029 aims to increase the number of

Irish export companies and start-ups, making exports the driving force of the economy. This could suggest that the growth of the economy is prioritised over environmental action.

Energy efficiency is crucial in the fight against global warming, and the use of fossil fuels must be radically curtailed (IPCC Working Group, 2022). Despite this, 82 data centres have been established in Ireland, 14 are under construction, and planning permission has been granted for 40 more, leading to a projected growth of 65% over the coming years (Mason, Hayes & Curran, 2024). In 2022, data centres used the same amount of electricity as urban homes, and renewable energy is syphoned from public transport and homes to maintain the supply to data centres. Due to pressure on the grid, new electricity connections in Dublin have been suspended. This could add millions of tonnes of emissions to our atmosphere, making it unlikely that Ireland will meet legally binding EU targets (Daly, 2024).

2.7 Ecological Marxism

Eco-Marxists propose a shift away from destructive capitalist systems, which they view as the primary cause of environmental devastation (Foster, York, & Clark, 2010). They maintain,

> The real problem is not a failure of the system to adapt to the environment, but the way the system is constituted: the ecological destruction we are witnessing is the result of the normal functioning of capitalism (Foster, York, & Clark, 2010, p. 15)

There is a need for capitalists to constantly accumulate resources, which leads to the idea that industry can continue drawing from inexhaustible sources while polluting sinks at an increasingly unsustainable rate. In this system, profits are held privately, while the costs are borne by society and offset by nature (Saed, 2019). In an online article, leading eco-Marxist John Bellamy Foster (2023) states,

> Our political-economic system, capitalism, is primarily geared towards the accumulation of capital, which prevents us from addressing this enormous challenge and accelerates its destruction... Mainstream social science has almost completely internalized capitalist ideology... They are accustomed to the view that society long ago ‘conquered’ nature... This feeds a denialism where Earth system-scale problems are concerned.

Foster, York, & Clark (2010) use the term Ecological Rift to describe the paradox of wealth, where individuals in capitalist nations get richer while societies get poorer. As they state,

> In the process, a huge ecological rift is driven between human beings and nature, undermining the conditions of sustainable existence: a rift in the metabolic relation between humanity and nature that is irreparable within capitalist society, since integral to its very laws of motion. (Foster, York, & Clark, 2010, p. 14)

This is based on Marx's idea of the Metabolic Rift. Marx wrote about what he called 'the universal metabolism of nature' and 'social metabolism'. In the pursuit of more, the capitalist system puts pressure on ecological systems, creating a metabolic rift. As Foster, York, & Clark (2010, p. 50) explain, 'Marx's theory of metabolic rift, as we have seen, was rooted in the alienation of nature under capitalism, particularly in the disruption of the soil nutrient cycle'. Foster & Holleman (2012, p. 1633) develop this concept further,

> The dominant post–Second World War sociological tradition was seen as having embraced a human-exemptionalist paradigm, in which human beings in technologically advanced societies were considered exempt from natural-environmental influences.

The concept of the Ecological Rift encompasses more than CC. It incorporates nine planetary boundaries which, if breached, will put humanity in danger. These include biodiversity loss, soil depletion, ocean acidification, water pollution and chemical pollution (Clark, Foster, & Longo, 2018). If wealth is measured solely in terms of economic value, then the natural world will continue to be viewed as free for exploitation. Currently, no repercussions appear forthcoming for those who overconsume our natural resources. Foster (1992, p. 77) asserts,

> The absolute general law of environmental degradation under capitalism can be defined as follows: the more capitalist economic growth proceeds according to its own internal logic, the more it tends to undermine the universal metabolism of nature, and hence the more it tends to degrade the conditions of its own production, including the health and well-being of the population and the ecological integrity of the environment.

The biggest offenders, such as fossil fuel companies, continue to operate as usual, despite warnings that this will have catastrophic consequences for our planet and its inhabitants (Foster, York, & Clark, 2010). Capitalist societies continue to point the finger for CC at everything except capitalism. It is easier to blame the bad choices of individuals and weaponise

CC against the most vulnerable groups in society (Graham-Leigh, 2020). This disempowers people, implanting the notion that they have no choice and suppressing radical responses.

> As long as prevailing social relations remain unquestioned, those concerned about the state of the environment are left with few visible avenues for environmental action beyond purely personal commitments to recycling and green shopping —the very interests most responsible for the current ecological mess. (Foster, 1999, p. 113)

Those with the most to lose from a change in the system are the loudest proponents of technological fixes and mechanisms such as sustainable development (Foster, York, & Clark, 2010). Indeed, UNESCO (2024), in describing education for sustainable development, labels the climate crisis as a threat to sustainable development. Eco-Marxists reject the concept of sustainable development and the idea of 'greening' capitalist societies. These approaches still promote economic growth and are invested in the value generated by new green goods, which inevitably leads to environmental destruction (Foster, York, & Clark, 2010).

Continuing in the same vein is not an option, and a radical change of course is the only way to avoid looming tipping points from which there is no recovery (Foster, York, & Clark, 2010). As Foster (1999, p. 12) proposes,

> The chief causes of the environmental destruction that faces us today are not biological or the product of individual human choice. They are social and historical, rooted in the productive relations, technological imperatives, and historically conditioned demographic trends that characterise the dominant social system.

If eco-Marxists are correct, then "education for sustainable development" is a misnomer. What is truly needed is an educational approach that allows people to explore ideas of climate justice. While the concept of justice in CCE has increased in recent years, it remains rare. For education to be effective, CC must be understood as multi-faceted and linked to injustice (Trott, et al., 2023).

While offering a powerful critique of capitalism's role in environmental destruction and its contribution to CC, eco-Marxism has received criticism from within and outside Marxist tradition. It is argued that placing the sole blame on capitalism neglects other contributing factors, such as the environmental failures of socialism or cultural and technological dynamics, leading to a reductionist view. However, leading advocates Foster and Burkett contend that eco-Marxism is not a defence of past socialist regimes, but a framework for understanding the

human-nature relationship through Marx's concept of the Metabolic Rift (Burkett, 2001; Foster, York, & Clark, 2010).

The concept has been criticised as being rich in theory, but vague around the practicalities of transitioning from capitalist to ecologically friendly societies, with no clear strategy for political action. However, Foster (2015, p. 3) is clear in his online essay about the process of transforming society.

> Such a social and ecological transformation will require a two-step strategy. First, we must mount struggles for radical reforms in the present that challenge the destructive logic of capital. Second, we must build the broad movement to carry out the long revolutionary transition to an ecological and egalitarian society.

Some traditional Marxists have accused ecological politics of being elitist, championed by middle-class environmentalists who have no perception of working-class struggles. Others point out that class struggle is prioritised over ecological issues, with economic inequality given precedence over environmental concerns (Benton, 1989). However, the fight against CC can be equated with working-class problems and economic insecurity, and ecological destruction may be inextricably intertwined. Workers who rely on natural resources are more susceptible to changes in weather patterns and often lack the financial resources to cope with disasters (World Bank Group, 2025). While the US Environmental Agency reports that racial and ethnic communities are the most vulnerable to CC (USEPA, 2023).

It has also been said that retrospectively imposing ecological awareness on Marx overstates his environmental foresight (Burkett, 2001). Rather than imposing ecological foresight on Marx, his materialist method is extended to encapsulate the current crisis.

> Eco-Marxism is an application of Marxist or Marx-Engel's theories to explain the ecologically destructive tendencies of capitalism, arguing that the contradictions intrinsic to capitalism lead to its ecologically destructive tendencies (Engel-Di Mauro, 2024).

2.8 Critique of Current Adult Climate Change Education in Ireland

The language around adult and further education has changed since the turn of the century. Learning for Life: A White Paper on Adult Education is written around the principles of lifelong learning and addresses social justice issues (Department of Education and Science, 2000). It notes that adult and community education play a vital role in combating educational

inequalities, but falls short of providing resources to these areas, as targeted, strategic investment is needed in the adult education sector. While the White Paper was non-committal, it perhaps provided some measure of hope that education could become a tool in the fight against social inequalities, particularly amongst socially disadvantaged learners. When the Further Education and Training Strategy (Solas, 2014) was released, the term "adult education" had been replaced with "Further Education and Training" (FET). Lifelong learning morphed into skills, and employment skills that matched employers' needs were central to policy formation (Shannon, 2019).

Education should play a vital role in addressing and developing responses to the multifaceted issue of CC. CCE requires a systems approach, but current educational policy does not support this methodology (Mochizuki & Bryan, 2015). The Education for Sustainable Development Strategy to 2030 recognises that fostering a culture of sustainability will challenge existing cultural norms. The strategy refers to the nurturing of learners' critical capacity, but no clear pathway has been mapped out for this to occur (Government of Ireland, 2022a). Educational institutions are noted as strategic locations to promote the UN Sustainable Development Goals, which may positively impact local communities (Government of Ireland, 2022b). As it is integrated into all strata of society, the education system can influence social norms and systemic values, making it a perfect setting for transformative CCE (Nusche, Fuster Rabella, & Lauterbach, 2024).

Research into CCE amongst adults in Ireland is an emerging field of enquiry. CCE in Ireland has largely centred on the scientific processes behind rising temperatures and on individual changes in the way they live. This has had little impact on promoting shifts in thinking or behaviour. Ireland's policy around climate education can be directly correlated with obligations to the EU (Waldron, Mallon, Barry, Sainz, & Gabriela, 2020). Ireland's CCE is rooted in ideas of individual change. It does not challenge the political or social status quo on what António Guterres described as the most pressing issue of our time (Security Council, 2021). Inroads have been made into delivering CCE through Global Citizenship initiatives in primary and post-primary schools (Waldron, Mallon, Barry, Sainz, & Gabriela, 2020). Saoltas, an NGO funded by Irish Aid at the Department of Foreign Affairs, has the task of disseminating Global Citizenship Education to Further Education settings. Still, there is no mandatory requirement to embed GCE in the curriculum.

Antonio Gramsci proposed the concept of civil society, which encompasses the institutions and practices lying outside direct state control. Civil society, including education, maintains social order and perpetuates prevailing ideologies through hegemonic domination.

For Gramsci (1977, p. 80)

> The ‘normal’ exercise of hegemony on the now classic terrain of the parliamentary regime is characterized by the combination of force and consent, which balance each other reciprocally, without force predominating excessively over consent. Indeed, the attempt is always made to ensure that force will appear to be based on the consent of the majority, expressed by the so-called organs of public opinion—newspapers and associations—which, therefore, in certain situations, are artificially multiplied.

Gramsci argued that the ruling classes in civil society maintain power by controlling cultural institutions, thereby shaping cultural norms so they appear natural to society. The beliefs of the ruling classes are adopted by subordinate classes who internalise them as truth (Osanloo, 2023). Gramsci believed that the relationships between classes and between the state and civil society were characterised by consent rather than coercion (Gill & Law, 1993).

In hegemony, the state is seen as a sentient presence mobilising capital, training the workforce and engaging in economic activity. It also incentivises and supports the private sector and is involved in the commercial sphere. Gramsci (1971, p. 244) stated,

> The state is the entire complex of practical and theoretical activities with which the ruling class not only justifies and maintains its dominance, but manages to win the active consent of those over whom it rules.

Education must be viewed against this backdrop to understand how its public good can be undermined. Those outside the elite groups are offered a watered-down form that precludes them from real knowledge and bars them from economic and political success. These invisible pedagogies deny certain socio-economic groups access to the type of knowledge that can help them excel in the real world (Mayo, 2014)

If CCE in Ireland is viewed through a hegemonic lens, we can see how it is used as a tool to serve the elite groups that retain wealth and power. By only allowing access to science-based, individually focused CCE, the knowledge available to everyone is restricted, and people can feel that the climate crisis is their fault. The ruling classes, or those at the top of the capitalist system, allied with the state, lead the public to believe that they need to change their behaviours and, through the limited education available, prevent them from investigating wider social and economic structures. Thereby averting them from questioning who the current system benefits and why there is a reluctance to move away from it (Mayo, 2014)

Across Gramsci’s writings are elements for an educational approach to elucidate radical reform of understanding and morals. Education plays a crucial role in hegemony, and in

Gramsci's thinking, education is not confined to institutions but also plays a role in the overall transformation of society. Educational institutions are aligned with the interests of the most powerful groups and reinforce existing hegemony. However, there is space for counter-hegemony, as hegemony is not static and is constantly open to renegotiation, regeneration and reformation (Mayo, 2008). Gramsci notes that the ruling class's power can be challenged and posits that organic intellectuals are paramount in challenging this domination. These intellectuals, who emerge from the working class, can change how power structures are viewed by instilling critical consciousness (Osanloo, 2023).

Counter-hegemony in education actively challenges cultural norms through critical awareness that questions dominant narratives and nurtures inclusive, democratic and emancipatory practices. Gramsci (1971, p. 333) states,

> The philosophy of praxis does not aim at the peaceful resolution of existing contradictions in history and society, but is the very theory of these contradictions. It is not the instrument of government of the dominant groups in order to gain the consent and exercise hegemony over the subaltern classes. It is the expression of subaltern classes who want to educate themselves in the art of government.

Counter-hegemony provides space to build alternative cultural and ideological leadership by fostering critical thought, political awareness and collective action against unjust systems. Cultural resistance can be constructed to create counter-narratives that oppose mainstream assumptions. Through counter-hegemonic practices, educational institutions become more than places to gain technical skills; they become spaces for active, critical involvement in society (Gramsci, 1971).

Marxist theory has been criticised for an overemphasis on class struggle that appears to exclude other issues such as gender and race (Engel-DiMaurio, 2024), (Leff, 2021). Modern Marxist scholars increasingly adopt intersectional approaches, which acknowledge that oppression based on race and gender often overlaps with class exploitation (Foley, 2019).

Gramsci's idea of organic intellectuals is said to overlook institutional structures and economic constraints, providing an idealistic view of agency (Manojan, 2019). It may downplay the entrenched power of capitalist structures and government institutions, such as education systems, which can co-opt opposing voices. Implementing ideas about organic intellectuals and transformative education may be problematic as the current system is not designed to empower people from marginalised groups (Jackson Lears, 1985). There has also

been criticism that Gramsci's theory is overly prescriptive and does not adequately account for the dynamic relationships of power and agency in educational settings (Clemitshaw, 2013).

However, other theorists, such as Giroux, have extended and reinterpreted Gramsci's work to adapt to modern school systems. They argue that educators can become agents of transformation, challenging neoliberal and technocratic forms of learning (Leonardo, 2025). It is noted that Gramsci wrote in a time before globalisation, which may limit the power of localised organic intellectuals to operate efficiently (Choto, 2025). Conversely, it can be argued that globalisation can muster a diverse set of organic intellectuals based anywhere in the world, united by a critique of neoliberal globalisation (Birchfield & Freyberg-Inan, 2004)

2.9 The Future of Adult Climate Change Education

Implementing changes in knowledge, skills and behaviour in institutions, educators, and learners requires a response that encompasses all levels of learning, across all age groups (Mochizuki & Bryan, 2015). While we can chart changes to the primary and post-primary curriculum that make the delivery of CCE more mainstream (Waldron, Mallon, Barry, Sainz, & Gabriela, 2020), the same evolution has not occurred at the Further Education level.

Walters (2018), states that lifelong learning approaches to CCE are vital as the catastrophes brought about by rising temperatures will affect every age group. Lifelong learning encompasses people of all ages and adopts a more inclusive view of learning. It acknowledges that learning does not happen in a vacuum. Lifelong learning principles acknowledge that learning environments are diverse and account for the realms sitting alongside education, including political and social structures. Adult Education is a significant component of lifelong learning. It incorporates many forms of learning, allowing adults to play an active role in society (UNESCO, 2022). CCE for adults must be relatable, drawing on learners' knowledge and an understanding of why participants want to learn (Arndt & LaDue, 2008).

Brazilian philosopher and educator Paulo Freire's (1970) seminal work, Pedagogy of the Oppressed, highlights the role of education in social justice and liberation, particularly for marginalised communities. He stated,

> Education either functions as an instrument that is used to facilitate integration of the younger generation into the logic of the present situation, or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality

> and discover how to participate in the transformation of their world. (Freire, 1970, p. 34)

Freire proposed the idea of the banking method in traditional education, where learners are empty receptacles waiting to be filled with knowledge. He advocated for a dialogical model where knowledge is co-created through the critical reflection of both teachers and learners. In Freire's (1970, p. 66) words,

> Those truly committed to liberation must reject the banking concept in its entirety, adopting instead a concept of women and men as conscious beings and consciousness as consciousness intent upon the world.

Communication is embedded in Freire's thinking, but dialogue must be rooted in humility, empathy, love and hope (Suzina & Tufte, 2020). Learners must use reflection and action to develop a critical awareness of their social reality, which will empower them to transform their communities (Freire, 1970). Freirean ideas of dialogical pedagogies and reflexive praxis influence community education. It adopts a learner-centred approach where the curriculum is centred on the lived experiences and knowledge of community members. Freire (1970, p. 80) states that in this type of education,

> The teacher is no longer merely the-one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow.

There is a social justice orientation; education is not seen as neutral; it can oppress or liberate (Kester & Aryoubi, 2019). Bolin (2017) investigates how Freire's educational philosophy can be applied to radical democratic organising and social transformation. He situates Freirean ideology in the prefigurative tradition, emphasising that the means of enacting social change must reflect democratic and just outcomes, i.e. democratic engagement is both method and goal. People are agents of transformation, and education must be used as a tool to develop critical consciousness and empower communities. Education as a participatory, democratic process can address systemic injustice. All of this is vital for transformative CCE, where the ideas and experiences of community members and learners are valued and incorporated into a curriculum built around climate justice. As Freire (1970, p. 39) proposes

> The more radical the person is, the more fully he or she enters into reality so that, knowing it better, he or she can better transform it. This individual is not afraid to confront, to listen, to see the world unveiled. This person is not afraid to meet the people or to enter into dialogue with them.

Although their work occurred in different historical and geographical contexts, Gramsci and Freire are two of the foremost figures in critical pedagogy. Both are rooted in Marxian thinking, which leads to commonalities. For Gramsci and Freire, education is political, entangled in the conflict surrounding social justice and societal transformation. Each one regards education as a transformative force in the culture and ideology of civil society, leading to the empowerment of disadvantaged groups (Mayo, 1999). Both offer insights into transformative adult education, which is crucial for providing CCE that makes a meaningful difference.

I recognise that there may be many approaches to CC, but this literature review addresses the subject from a Marxist perspective. I have viewed CCE through the lens of Antonio Gramsci and discussed future developments in CCE by drawing on critical pedagogies as proposed by Gramsci and Freire. Further research is needed into what adopting learner-centred, critically reflective models of CCE would entail in terms of curriculum development and delivery. It would also enhance the research if the voices of learners could be heard in the debate, particularly those of adult learners engaged in non-formal education.

CHAPTER 3

METHODOLOGY

On Thursday evenings, I drive to Edenderry, Co Offaly, to teach Level 3: Introduction to Climate Justice. As an Adult Educator, I was excited when I was asked to deliver this course, as it was only rolled out in 2023, and this was the first time the Laois & Offaly Education and Training Board (LOETB) had run it. I was initially told that 6 participants had signed up for the course, and on the first night, 3 people turned up. Most participants dropped out when they realised this was not a short 6-week course. I am now left with one die-hard student who turns up every week. This student had a keen interest in CC and understood the wider ramifications and interconnectedness of the subject before joining the class. She is also not a native of Edenderry, having moved there from Dublin.

Edenderry lies at the edge of the Bog of Allen in the Irish Midlands and has a long association with peat harvesting for energy production. The commercial practice ended in December 2023 when the Edenderry power plant ceased production of peat-fired electricity. Bord na Móna[8], had completed the transition from peat harvesting to climate solutions, and the Edenderry plant now burns biomass (O'Doherty, 2023). *But there is a deeper, more personal connection between the people of Edenderry and the bog. For generations, people have undertaken the backbreaking work of cutting the turf to heat their homes. Those who do not cut it themselves buy from local contractors. For the people of Edenderry, their social world and identity are intertwined with the bog* (O'Connell, 2019).

A Just Transition[9] Model was adopted to help Bord na Móna employees transition to new jobs, and a National Just Transition Fund was established to support workers and the community (Dept of the Environment, Climate & Communications, 2022). *This year, almost €6 million in funding has been allocated under the EU Just Transition Fund to assist Midlands community projects* (Hussey, 2025). *However, MEP Barry Cowen has stated that the application process must be simplified to allow community groups easier access to funding* (Fagan, 2025).

[8] Bord na Móna is a semi-state body set up in 1946 by the Turf Development Act to develop Irish boglands as an economic resource. In 2018, it began to transition from peat production and burning towards renewable energy with the aim to be carbon neutral by 2050.
[9] Just Transition was originally used by US trade unions in the 1980s. In the context of climate change, it is meant to ensure that all sectors of society are supported in the move to a greener future.

One student who attended the first night of the Climate Justice course was a former employee of Bord na Móna, and he felt that Just Transition had done nothing for the town of Edenderry. He stated that he was offered courses to retrain with LOETB and was grateful for them. However, little had been done to support the local community in dealing with the job losses caused by the move away from peat burning. This CC solution appears to have left a bitter taste in Edenderry and other Midlands communities, who feel they have been asked to bear a heavier burden than those in other parts of the country (O'Connell, 2019).

Against this backdrop, the Climate Justice course was launched, crashing and burning before it truly left the ground. Perhaps this situation illustrates the central question of my research as explored below. How can we develop relatable, effective CCE for adults?

3.1 Introduction

At the start of this Master's programme, I embarked on an exploratory journey to understand the current CCE provision for adults in Ireland. This research was shaped by my connection to the natural world and my role as an Adult Educator with LOETB. Education does not happen in a vacuum, so I wanted to situate the current curriculum within the capitalist structures that govern our society, to understand how the dominant narratives colour our perception of the causes of CC and how they should be addressed. To me, understanding the background of CC and CCE was crucial in addressing my research question, ***'How can effective, relatable climate change education for adults be developed?'***

I adopted a qualitative approach to my research to understand the lived experiences of people who develop and deliver CCE in adult, community and further education settings. This allowed me to explore the participants' stories of CCE, what they feel is working, and what needs to be changed. This chapter outlines my ontological and epistemological position regarding this research. It will also acknowledge the ethical considerations and limitations of the research.

3.2 Ontology & Epistemology : Social Constructionism & Critical Theory

For as long as I can remember, I have felt a deep connection with nature and the natural world. I am most alive when I am out in 'wild places' as I call them, places where the landscape dominates and makes me feel small and almost insignificant. However, those parts of my life always seem compartmentalised; my everyday life and my connection with nature do not seem

to align. Living in an industrialised nation under a capitalist system, we encroach upon nature while simultaneously disconnecting from it. Undertaking this thesis was partly an exploration of that dichotomy, as this disconnection from nature can lead us to place less value on it. I chose to use a Marxist lens because CC is about more than our changing environment. It is tied to injustice, inequality and the destruction of the environment for profit.

For me, CC is the result of our disregard for nature in the race to commodify everything. However, the mention of CC can cause divisions with those who believe in the concept holding fast against those who deny there is a problem. Current science-based, individualistic approaches to CC have seen battle lines firmly drawn with little room for manoeuvre. A game of blame is being played with fingers pointed at different sectors of society, making them feel alienated and less inclined to participate in debates around what to do to secure a liveable future for all people. It is against this backdrop that I wanted to explore how CCE for adults could help heal rifts and open up meaningful dialogue, which could lead to effective action against the climate crisis.

Ontology can be described as our subjective or objective view of reality/ This drives our epistemology, or what we perceive as cogent knowledge. My epistemology will interact with my field of research, influencing what I understand and how I understand it. My ontological and epistemological approaches guide my methodology. Together, they create research paradigms which encapsulate belief systems (Pessu, 2019). However, paradigms are not always static and well-defined. While I favour social constructionism and critical theory, other ideas may influence and permeate my work. For example, Malm (2018), rejects constructivism in favour of realism when discussing the effects of global warming. These real effects cannot be denied, but how an individual interprets the cause of wildfires or flooding events may be linked to the reality created by the social structures in which they are embedded.

Social constructionists believe we are born into a social world that has already been constructed, but we can change this. We are shaped by society, but we also have the agency to reproduce or change social structures. Narratives around CC causes and responsibilities are constructed at international, national and local levels (Donnelly, 2008; Eckersley, 2013; Stehr & von Storch, 1995). Understanding these narratives is crucial for mapping responses to CC, including policies related to CCE (Kulaeva, 2024). Adopting a social constructionist ontology to my research allows me to examine how CC has been embedded in Irish society. It provides me with a deeper understanding of how ideas of CC and mitigation responses have been developed.

To attempt to develop an effective adult educational response to CC issues, it is necessary to understand how CC is perceived within local communities. CC is a vast, complicated issue, and people's understanding may be rooted in local traditions and cultural frameworks (Scoville-Simonds, 2018). A social constructionist epistemological approach seeks to uncover how people's views of CC have been constructed through their lived experiences and shared knowledge. Views and beliefs around CC do not develop in isolation. Many CC challenges have been communicated through scientific and technological models, constructing a narrow view of the problems. They do not situate CC within wider societal structures and omit notions of power and inequality (Kirby & O'Mahony, 2017).

Critical theory questions the structures of power and draws on multiple disciplines, including sociology, cultural studies, linguistics, and Marxism. It also references postmodern thought and examines notions of global capitalism and the concept of late capitalism. The roots of critical theory are varied, with a multidisciplinary approach adopted in its formation (Garlitz & Zompetti, 2023). It is associated with the Frankfurt School and other European thinkers who base their outlook on Marxist or Hegelian principles.

In critical theory, research seeks to identify the conditions that underpin social interactions and how we interpret these associations. It involves critiquing what is happening in society and investigating how people understand their social world (Share, Tovey, & Corcoran, 2007). Eco-Marxism critiques capitalism, not just as an economic system, but as a force that shapes culture and human ideology, including our relationship with nature. The metabolic rift describes how capitalism has alienated us from nature, allowing us to buy into the idea of sustainable development, which is just a greening of capitalism (Hornborg, 2024).

Educational development at all levels, from everyday interactions to social movements and formal settings, may be intertwined with how we address the challenges associated with CC. While theories are only one way of knowing, they can serve to enrich or weaken our response to the climate emergency (Wrigley, 2021). Thinking critically allows us to evaluate the world, examine who holds power and dissect how knowledge is distributed and who disseminates it (Giroux, 2010). Critical reflection is a principal tenet of adult education, meaning the discipline is perfectly positioned to adopt transformative CCE based on more than scientific principles. This can enable students and educators to explore climate solutions in areas beyond technological advancements.

3.3 Methods of Data Collection

Using qualitative research enables us to investigate multifaceted experiences by disclosing context and supporting a more comprehensive perspective on the participants' views. Qualitative research permits a deeper connection to the nuances of human experience, which cannot be captured through numerical data collection alone. This type of research is vital for exploring real-world issues, but it also opens the door to researcher bias, as interviews are co-created by the questions posed and the responses offered (Lim, 2024). This meant that I had to adopt a critically reflexive approach to the research to limit my influence on the answers given.

Distancing myself from the research was difficult, as people attuned to CC are generally passionate about the subject and engage in deep conversations when in the company of like-minded individuals. As many of us are involved in adult education, we share experiences and perceptions of CCE and what is happening in the space. I actively attempted to recruit participants on both sides of the CCE debate, but those who agreed to participate were individuals who felt that change was necessary. When reviewing the interviews, I drew only from the participants' answers and observations to inform my findings.

The primary method employed to gather data for my research was semi-structured interviews, as I believed this approach would provide me with the flexibility to probe set themes in an open-ended manner. In semi-structured interviews, the questions can be restructured or reordered. The researcher can use their judgment about when and when not to interrupt the flow of the participants' replies (Galletta, 2013). This allowed conversations to flow freely, and the participants were given the chance to explore the topic of CCE. They had the time to develop their unbiased opinions and reflect on their experiences. As a researcher, I interjected only when it was clear that the conversation needed to move on.

As this is an exploratory piece of research, my five questions centred on current CCE provision, the values underpinning it, what is working and what is not, and what effective CCE would look like (See Appendix 1). The questions were given to the participants in advance, to allow them time to gather their thoughts, as I felt this would produce deeper, more nuanced responses. I began by asking the participants about their experiences in the field. This allowed us to ease into the topic, and most interviews naturally evolved from that initial question. The topics I wished to explore were covered, but not always in a linear fashion. Participants wove their stories and created narratives in a more conversational, natural way.

Some interviews were conducted in person, and the conversations were recorded on a mobile phone. I later transcribed these recordings into Word documents. Other interviews were conducted over Microsoft Teams, allowing me to record the conversation both audibly and visually, and create a transcript. The transcripts were downloaded and saved as Word documents. I reviewed the transcripts produced by Teams while listening back to the interviews and corrected any mistakes to create an accurate copy of what was discussed.

Once all the interviews were completed, I coded the data by extracting five themes from my initial research questions, i.e. climate change, values, what is working, what is not working/barriers and what needs to happen to develop effective CCE. I printed out the interviews and used various coloured highlighters to assign responses to the different themes. I then took each theme and grouped responses by content, creating several subthemes in each category. Finally, the qualitative data was analysed based on the research in my literature review.

3.4 Fieldwork

Two of my initial participants had come to my attention through my work in the ETB. They were contacted by email and readily agreed to partake in interviews at a mutually convenient time. Another person whom I had met through a conference felt that they were not the right fit for my research and put me in touch with someone they believed would be a good source to inform my exploration of the subject. I had heard one of the participants speak at the same conference, and when contacted by email, they agreed to share their experience and knowledge. The other two participants were referred to me by other participants in the research. I was surprised by the number of referrals I received, and had I had more time to conduct my research, I would have had a vast pool of people to call on.

Although I was nervous, my first interview, conducted over Teams, went off without a hitch. The participant enjoyed telling their story, and we had the shared experience of working in an ETB setting, although not in the same area. My second interview was very different. This was conducted in person, and from the moment I arrived, the participant made it clear they did not have much time to spare. This left me feeling like an inconvenience, as though my time was somehow less valuable than theirs. During the interview, they referred to my lack of knowledge in a field where they were extremely well-informed, well-read and well-published. When the brief interview had concluded, I was advised that I had talked too much and that I could learn a lot by listening more.

Being new to fieldwork, this knocked my confidence and made me cautious about the two Teams interviews I had to conduct later that day. On my journey home, I reflected on what had happened and whether I should change my style going forward. During the following interview, I made a conscious decision to remain quieter, just interjecting to signal that I was listening. It did not seem to work. My participant wanted to engage in a robust discussion, and I allowed them to drive the conversation. I began to develop a better sense of when to listen and when to speak. This was a valuable learning experience for me, and subsequent interviews proceeded without incident.

3.5 Ethical Considerations

Before I commenced the interviews, a proposal for my research was submitted to the Department of Adult and Community Education at Maynooth for consideration. In this proposal, I outlined the reasoning behind undertaking this exploratory research into adult CCE (See Appendix 2). Details were given of the scope of my enquiry and what it would entail. Ethical approval was granted by the directors of the MEd Adult & Community Education programme, Dr Michael Murray and Dr Angela McGinn.

While CC and CCE are not sensitive topics in and of themselves, many of my participants are employed in Irish educational institutions. Therefore, it was necessary to protect the participants' identities by using pseudonyms and removing any identifying features. Before participating in the interviews, each person was sent an information and consent form sheet that outlined the nature of the research (See Appendix 3). The participants were advised that they could withdraw their consent at any time. This would mean that any data collected from them would be destroyed.

I do not think that issues of power arose in the interviews as the participants did not come from vulnerable or marginalised groups. They were professionals with more experience in CCE than I. Interviews were arranged at times and places that suited the participants. It was not anticipated that emotive topics or issues that might cause personal upset would arise during the interviews.

CHAPTER 4

FINDINGS & ANALYSIS

4.1 Introduction

When I chose to undertake this exploratory research, I wanted to speak with people involved in developing, delivering or otherwise supporting CCE for adults in Ireland. I felt the participants' stories would give me real insight into what these people currently face when trying to devise CCE programmes and engage learners in Further and Higher Education spaces. The sample was necessarily small, due to the time restrictions imposed by my thesis completion date. As we engaged in conversation, they shared their accounts of what they felt was happening in adult CCE. They proposed ideas for addressing my research question, ***'How can effective, relatable climate change education for adults be developed?'***

Five main themes emerged from the interviews, encapsulating the participants' thoughts on the subject of CCE. The first theme focused specifically on CC and how our perceptions of it are influenced by cultural norms, perpetuated by those in positions of power. The participants then recounted the values they attributed to the current iteration of CCE and how this is portrayed in the type of education available, particularly in further education settings. We discussed the positive aspects of existing CCE programmes. The participants were vocal about what is not currently working or the perceived barriers to effective CCE. Finally, ideas were proposed on what was needed to deliver effective CCE, with participants having well-defined ideas of the models of education required to reach learners in further education, adult, and community education spaces.

4.2 Theme 1: Understanding Climate Change

Some participants spoke specifically about CC, how it is perceived and its relation to capitalism. Yoda had strong views on the subject, stating:

> That relationship between capitalism, consumerism, and climate is completely… misrepresented. So, there's a lot of things that are missing and I feel it's a very disconnected debate. It's connected to the structures of power and the structures of profiteering and consumption that are at the heart of climate change.

The participants felt that people are aware of CC, as Leia puts it, ‘Climate change is a really key issue for local people, something they're genuinely worried about.’ While Han also acknowledges this understanding:

> But it is very hard, like, yet at the same time there is a recognition, ordinary people will, you only have to look at the floods and the extreme weather, that climate change is a real thing.

Padme reiterates that there is a general understanding of CC, but feels that it causes anxiety, and people feel ill-equipped to deal with it. They think that everyone is aware of the reality of CC because of catastrophic weather events occurring around the world and increased flooding here at home. However, people avoid the subject because it makes them anxious and scared. As she puts it, ‘It's too much like the amount of people that say I can't turn on the news, I can't look at the news. It's just too much.’

Yoda also spoke about misinformation, or misconceptions of CC:

> I mean, they talk about climate change as if there was some kind of, you know, great mysterious thing that we didn't know about. And if we only knew about it, we would act like that. We know about it, but the powers that be don't want to act because those who drill for oil and who destroy the environment make a lot of money.

Yoda was also disturbed by the way the narrative is controlled, so that people only hear what those in control want them to hear. They refer to Denis O'Brien's acquisition of Independent Newspapers in Ireland as an attempt to change public opinion of him. They go on to say:

> Elon Musk did exactly the same thing in buying Twitter. That is very disturbing because it’s very hard to overpower social media nowadays. It’s very hard for any other medium to take it on. They don’t really have the means to challenge it, and it informs so much because people go online all the time.

Padme points to consumerist society as a driver of CC. Like Yoda, Padme feels that misinformation is rife and is driven by unreliable online sources. They point to big corporations creating news generated by AI, which dismisses CC as a myth, or at the very least, allowing it to be circulated. They state:

> They're putting it out there, or else they're, they're deliberately deciding not to stop the misinformation that's being put out there to tell people climate change is happening. Elon Musk is going to take us all to Mars with him.

Yoda also spoke of how capitalism is ingrained in our psyche because, 'The whole idea of the internalisation of the modes of capitalism, where it becomes part of your consciousness, becomes part of your DNA'. They state that our modes of participation in society are defined for us, and we should be at work, producing goods and services, so we can acquire money for things that we may not need. They clearly state, 'You don't set up the norms of participation in society yourself. You can, but then you would need to be outside of it'.

For Yoda, the whole CC debate is anthropocentric and focused on how it will hurt humans. We do not consider the potential harm to the Earth or other species. People are socialised into thinking they are entitled to take from the natural world, and this is a complex concept to challenge. Nevertheless, despite the ethics of capitalism being competition and competition being seen as a virtue, they remain hopeful:

> It is a hard battle, but it has to start somewhere. That's why I'm not as pessimistic. I always feel. You know, it's the way life is. You know, you start something small. You start at some of the truths that are taken to be truths now.

Analysis of Theme 1

The participants' reflections align with the eco-Marxist theory that CC is a problem rooted in capitalist modes of production, which prioritise unending growth, personal accumulation and the commodification of nature over ecological welfare. Yoda speaking of 'structures of power, profiteering and consumption' links directly to Foster, York, & Clark (2010), declaring that capitalism is unable to address CC because it depends on ever-increasing extraction and consumption of resources. The disconnect between production and environmental protection, which Marx referred to as the metabolic rift and Foster, York, and Clark (2010) referred to as the ecological rift, is central to the design of capitalist economies. 'Capitalism's war on the earth is not simply a result of greed or poor planning, but is rooted in the very logic of capital accumulation.' (Foster, York, & Clark, 2010, p. 7).

Yoda goes so far as to say that capitalist ideologies are part of our DNA, hinting at a psychological and cultural internalisation of capitalism's ethics of commodification and competition. Social values and norms have adopted capitalist ideology and, in doing so, have become destructive in themselves. Foster, York, & Clark (2010) warn of this naturalisation of

degradation as the price for progress, which alienates people from the natural world, allowing us to commodify it.

The concerns raised about misinformation and control of the narrative speak to Gramsci's hegemony, where the ruling class only allow access to specific knowledge or information. As Gramsci (1971, p. 57) suggests, 'The supremacy of a social group manifests itself in two ways, as 'domination' and as 'intellectual and moral leadership.' Hegemonic domination is not only displayed through overt power and control, but also through influencing cultural norms and beliefs. Awareness of CC is being controlled to suit those at the top of the capitalist hierarchy. The references to misinformation and narrative control also speak to eco-Marxist assertions that greenwashing, climate denial and technological solutions are a diversion from calls for structural change. Foster (1999, p.113) states that there is a 'need to transform the major social bases of environmental degradation, and not simply to tinker with its minor technical bases'.

Yoda mentions the anthropocentric framing of CC, focusing mainly on human suffering, which is reminiscent of Marx's (1976, pp. 637-638) notion of alienation from nature, i.e. 'Capitalist production... disturbs the metabolic interaction between man and the earth.' The comment about competition as a virtue highlights the ethical shortcomings of capitalism. This links to Marxist theories of nature as a resource and of capitalist ideology eroding the relationship with nature (Clark & Longo, 2018). Humans see themselves as being separate from nature because, as referenced in Chapter 2, according to Foster & Holleman (2012, p. 1633), 'human beings in technologically advanced societies were considered exempt from natural-environmental influences.'

The participants' narratives reveal a profound awareness of the relationship between capitalism and the climate crisis, aligning closely with eco-Marxist critiques. Yoda's analysis of power, profit, and consumerism illustrates the metabolic and ideological rifts at the heart of capitalist society. The internalisation of capitalist ethics, where competition and consumption become default modes of participation, echoes Foster, York, & Clark's (2010) warning that environmental destruction is not a failing of capitalism, but its logical outcome. As stated in Chapter 2, Foster, York, & Clark (2010, p. 15) support the idea that 'the ecological destruction we are witnessing is the result of the normal functioning of capitalism.'

The roles of misinformation, controlled media, and anthropocentrism reflect how capitalist systems protect their interests not only through economic force but also through cultural and cognitive hegemony. As Gramsci (1977, p. 264) notes, 'Socialism will triumph by first capturing the culture via infiltration of schools, universities, churches and the media by

transforming the consciousness of society'. If we do not have robust CCE that addresses social issues of injustice and inequality, then there is no resistance to this cultural hegemony. These findings reinforce the argument that effective CCE must move beyond scientific literacy and incorporate a critique of the ecological consequences of capitalism. Otherwise, 'The economy and the earth are headed for a fateful collision—if we don't alter course.' (Foster, York, & Clark, 2010, p. 14)

4.3 Theme 2: Values Being Promoted by Current Climate Change Education

Scientific Models and Individualisation of Climate Change

Most participants agreed that the majority of CCE in Ireland is based on principles of individualisation. Anakin points out that 'There's an individualisation of practice around certain stuff.'

CC is framed as a problem caused by individual behaviour, which can be solved through individuals' actions, such as recycling, using less energy, switching to electric cars, or eating less meat. Han describes it as 'you know, oh yeah, we must make a change about climate change, but putting it back on individuals.'

These values are reproduced in most CCE offered in Adult, Community and Further Education. Padme notes:

> We delivered the Level 4, which focuses on delivering environmental sustainability awareness at an individual level. So, it's about personal responsibility and a little bit about community. But more about personal responsibility.

Yoda and Rey acknowledge there is some individual responsibility. As Yoda frames it, it is about, 'I'm not saying we're not individually responsible. Of course, we are, but we play a very small part in the game… the culture of capitalism is… very individualistic… but I'm talking about possessive individualism.'

Rey feels this has been used against people because, 'That narrative of individuals causing climate change, I think, even though we do all contribute in some way, it's like it's being exploited'.

Rey posits that this individualisation shifts the responsibility for CC mitigation from structural systems, governments and large corporations to individuals. People feel they are being blamed for not being able to afford 'greener' choices. Mando expresses this by saying,

> In the communities I work with… (people) feel like they are being blamed for not being able to afford to do those things. It makes them feel they have nothing to contribute to the climate debate, so they don't get involved.

Consumer-based solutions can prove disempowering for people who cannot afford to purchase organic food, electric cars, or install solar panels and energy-efficient windows. This is counterproductive, as Rey states, 'it's really important that people are empowered to take action, but empowering them to take a form of action that then they realise will not actually make any change is …. very disempowering.'

People may also feel that they are being unfairly burdened with CC. Yoda states:

> I know that individual level household pollution is a very small part of what damages the Earth, although it's made to feel you're largely responsible for it, which is absolutely not true… It's not people's fault. It's not. You don't blame individuals.

According to Leia, this can leave people disillusioned, 'One is you're selling people a cod, right? So, you and I turning off our light bulbs all the time is important, right? But it doesn't matter a bit if the other bigger pieces aren't fixed, right?

Han feels this may cause more problems, as 'There's a backlash now against green issues. Part of it is because of the kind of neoliberal-type green agenda.'

Some participants thought that many of the courses available to learners are designed around scientific CC models and do not situate the problems within broader social structures. These courses portray individual actions as an adequate response to the climate emergency. As Rey sums it up,

> There's climate education that's still pretending that that's an adequate solution in the face of climate change, and it's not. So those types of values are, unfortunately, I think, what dominate. The scientific understandings, and even if it touches on issues of justice like women, or people of colour being more affected, or the global south being more affected by CC, it doesn't really address those reasons why.

Putting the Economy Before the Environment

Solas and ETB Ireland's CCE remit appears to centre on upskilling and training people to work in transition industries associated with the move towards green technologies. Leia acknowledges 'FET is so focused on green skills for the green economy, which is absolutely

needed and absolutely in, like FET, is the place for that. But there is no need to only do that.' While Rey feels the focus is on 'Individual behaviour change. Eh, pro-economic solutions.'

These courses fulfil obligations set out under EU policies and apply to both teaching staff and learners. As Padme points out, 'Early on, there was a drive to get tutors into teaching environmental education, and they asked us to do a Level 5 course in environmental sustainability awareness that focused on businesses.' They go on to say, So, the kind of courses that we're… teaching, you know, can be a kind of a tick the box because you have to, rather than something that's real.'

Analysis of Theme 2

The views of the participants on current CCE provision suggest that it promotes individualisation, in which people are made to feel an overbearing sense of responsibility for causing CC. Learners are indoctrinated into the prevailing beliefs that individual behaviour modification will mitigate CC, while the role of overarching structures is largely ignored. This does not serve the interests of learners who are genuinely interested in climate action. As stated in Chapter 2, Foster (1999, p. 113) maintains 'those who are concerned about what is happening are left with few visible avenues for environmental action other than purely personal commitments to recycling and green shopping'.

Unlike critical forms of education, the type of education on offer disempowers people, making them feel they have no agency, leading to disengagement. As Leia puts it, 'you're selling people a cod.' Rey also refers to this disempowerment 'empowering them to take a form of action that they realise will not actually make any change is … very disempowering.'

While participants agree that we hold some level of individual responsibility, it was generally acknowledged that this will not be enough to offset CC, with systemic change required. This rejection of individualised CCE aligns with eco-Marxist critiques that greening behaviours, such as switching to electric cars or buying organic food, are embedded in capitalist consumption and do nothing to change the overarching system. 'False solutions are advanced that serve to legitimate the system, while reproducing the ecological rift under the guise of ecological modernization.' (Clark, Foster, & Longo, 2018, p.654).

It was also inferred that the economy was valued above the environment, with a focus on skills rather than critical thinking. One participant noted that courses may have derived from Ireland's EU obligations. This is reflective of education in capitalist societies, where, as Gramsci (1971) notes, education restricts access to knowledge that can be used in the real

world, instead providing opportunities for future employment. He suggests that school is 'designed to perpetuate a specific traditional intellectualism and to exclude the working class from access to higher forms of culture.' (Gramsci, 1971, p. 40-41).

This emphasis on science-based models of climate education and the promotion of employability skills mirrors Gramsci's description of the hegemonic control of education. To Gramsci (1971, p. 32), 'the traditional school has always been an instrument for the reproduction of the existing social order.' Adult CCE operates under a hegemonic rationale that aligns with neoliberal values of personal responsibility over structural critique. The neoliberal reasoning dictates that the primary function of education is to produce workers for industries, as evidenced by the Green Skills Programme mentioned in Chapter 2, courses that provide learners with tools to participate in 'green' industries are prioritised over those that focus on climate justice (Solas, 2024).

Participants noted a sense of disempowerment, especially in communities unable to afford proposed green solutions, and this can be seen as a form of ecological alienation. Capitalist structures do more than materially exploit nature; they also sever emotional and ethical connections to the environment. Thus, CC becomes a problem to be addressed through market instruments such as taxes on fossil fuels or grants for home energy upgrades, as well as changes in individual behaviour (Benton, 2002). Furthermore, the technocratic framing of adult CCE, where scientific facts are neutral and solutions are couched in terms of technical fixes, links to Marxist ideology of political neutralisation. Questions of power, equity and class are removed from CC discourse, meaning that capitalism is not scrutinised as a driving force of climate breakdown (Foster, York, & Clark, 2010). Foster, York & Clark, (2010, p. 14), describe it as follows:

> The dominant environmental discourse tends to depoliticise ecological problems, treating them as technical issues to be solved within the existing social order, thereby obscuring the role of capitalism as a system of unsustainable growth and exploitation.

Eco-Marxism is also reflected in participants' mention of consumer-based solutions, where sustainability supports the ecological rift by encouraging people to continue to take from limited resources. In other words, the ideology of 'consumer sovereignty and green consumerism serves to legitimate the system, while leaving untouched the underlying social relations of production that are the root cause of ecological degradation' (Foster, York & Clark, 2010, p. 440).

Observing the values of current CCE through Marxist philosophy, as developed by Gramsci and eco-Marxism, allows us to see how focusing on scientific models and individualisation deflects from the examination of structures of power. Hegemonic control of education reproduces the cultural norms as decreed by those in positions of power. This system detaches us from nature, neutralises political thinkers and, therefore, political movements, and frames CC as a technical problem rather than a political one. Greenwashing is used to legitimise the system, while continuing to do the very things that caused the problem. There is no direct link drawn between economic systems like capitalism and CC, nor between CC and climate justice.

4.4 Theme 3: What is Not Working or Poses a Challenge

Generally, the participants felt that the current CCE provision is, in many ways, not fit for purpose and faces many challenges in providing relevant information that would allow learners to think critically about the climate crisis.

Scientific / Individualistic Approach

Rey spent time working abroad with communities adversely affected by CC. On returning to Ireland, they stated that 'The first problem that I saw with climate change education in Ireland was that it was way too scientific.'

They felt this kind of approach adopts a narrow, individualistic view of CC. It does not make connections with patriarchy, colonialism or other social issues. It does not highlight capitalism as a leading cause of CC, but Rey suggests if people could make that link, they would understand why 'Some solutions are not really solutions.'

When the Introduction to Climate Justice Tutor Handbook and later the Level 3 course were being designed, Leia says a conscious decision was made 'Not to go down the route of individual, consumer-based solutions.' This was based on the fact that these solutions may be financially unobtainable to many people. Suggesting that people must spend money they do not have to protect the future can be very disempowering. Anything that does not tap into the power that people do have is counterproductive.

Inaccessibility, Exclusion and Intersectionality

Several participants declared that CCE is inaccessible to specific sectors of the population and, therefore, acts as a tool for exclusion. CC policies are inadequate and push

people further away from wanting to address climate issues. This is reflected in the education system.

Han points out that the structural issues of CC cannot be addressed as long as we have inequality between and within nations. This type of inequality is perpetuated under the current models of CCE. If people feel excluded, they are more likely to align themselves with climate deniers or position themselves adjacent to this. Exclusion can be observed in the language used around CC and a lack of prior science education. As Rey states, 'There's no climate education that's working with people around those types of understanding.'

Anakin states:

> There's huge gaps in the policies. There isn't enough acknowledgement of, eh, overlaps between environmental concerns and then issues around poverty, around marginalisation, racism, there isn't half enough focus on how all of those interrelate.

Rey also feels that CCE is siloed in universities, and even within the universities, it is further siloed and treated as a side issue. It can be challenging for CCE to find a home in universities, as it requires a multidisciplinary approach that draws on various disciplines, including science, sociology, communications, and more. Therefore, coverage of CCE may be disparate. Rey believes, 'CCE, like a really intersectional, interdisciplinary climate justice course would actually be quite radical.'

Even the language used around CC can be exclusionary when it comes to participation in education. Leia says that when she first started looking into developing a Climate Justice course, she realised that the literacy levels presumed, even by community activist groups, were very high. It was almost as if it was taken for granted that everybody had a university education. The presumption of certain levels of scientific and numerical literacy unintentionally excludes people from disadvantaged communities. The standards assumed are much higher than those typically encountered in adult education services. Feedback from tutors, other stakeholders, and learners indicated that CC is huge, and they would be afraid they would not have a clue what was being discussed.

Using the term 'climate change' can also discourage people from getting involved. Mando expresses it by saying, 'It can be a challenge getting people to engage if you say it is CC related. I think people are wary of that.' Leia faces the same issues: 'In disadvantaged communities, it is hard to get people, and we've tried calling it everything under the sun.'

Focus on Skills and Certs

At a national policy level, in FET, the workforce is the focus when it comes to formulating an educational response to the climate crisis. Leia points out that in second-level education, 17-year-olds are not taught to turn off their lights but are informed of the global causes and consequences of CC. Higher Education is tackling it, but FET is shirking its responsibilities. Rather than systems-based thinking, there is exceptionally narrow, siloed thinking. State policy on FET appears to intentionally overlook the fact that this is the public education system for adults pursuing QQI levels 1–6. The Solas Green Skills programme makes no mention of climate literacy or climate justice education, despite climate justice being one of the key strands under the Social Inclusion and Community Activation Programme (SICAP). Leia states, 'They have no interest in developing climate literacy, and I would have a worry about that.'

Padme uses slightly different language to express the lack of movement at policy level,

> But you feel like, you know, changing what kind of dish soap you use when so much is not happening at a political level that needs to happen. It's just like, you know, you're pissing in the wind.

Some participants feel that many ETBs now have a strong drive for learners to achieve certification in the modules they undertake. However, often, students who get involved in CCE do not want certs; they want to do something good for the community. They are retired people, long-term unemployed people, those on CE schemes, or individuals already involved in projects like Tidy Towns. Sometimes they just want to talk and discuss their climate anxiety. Padme is on the frontline with this and feels like educators are:

> Trying to do a combination of meeting their targets and their data-driven stuff, and the tutors themselves are trying to do something that is more community education. So, you're kind of caught between two stools.' Leia feels it is unfair that, For the drive for Certs, they don't recognise the Level 3 introduction to Climate Justice under the green skills target with Solas.

Within the institutions themselves, little has been done to reduce emissions and become more environmentally friendly. Learners are being taught to think critically and about energy use, but they are sitting in classrooms where, as Padme puts it, 'the heating system is pushed up to 90 and the windows are open because they can't breathe.' They can feel like the ETB is

just paying lip service to climate issues. Only a few climate professionals have been hired by a limited number of ETBs, specifically those related to their building's portfolio.

Analysis of Theme 3

In discussing what is not working in adult CCE, participants highlight the exclusion of marginalised groups, a lack of coherent policy and the focus on skills in FET. This concentration on economic function over climate justice reflects the hegemony of neoliberal ideology, which prioritises economic productivity over critical engagement and uncensored participation. Foster, York, & Clark (2010, p. 430) contend that 'The dominant response to the ecological crisis has been to treat it as a new frontier for capital accumulation, promoting green technologies and jobs while leaving the underlying social relations of production untouched.'

The exclusionary language of CCE, as described by participants, is reinforced through the use of scientific and technocratic jargon, which may act as a gatekeeping mechanism, creating a stratification in access to knowledge and information. This is reflective of Gramsci's concept of cultural hegemony, in which dominant groups control the production and dissemination of knowledge. Knowledge is therefore used as a tool of domination, which limits the ability of subaltern groups to access alternative worldviews. Gramsci (1971, p. 350) stated, 'Every relationship of hegemony is necessarily an educational relationship,' and hegemonic education ensures that subordinate groups believe the existing state of affairs is necessary and legitimate. Assuming that learners already possess a certain level of climate literacy suggests the dismissal of working-class, community knowledge, through cultural invasion, whereby a community's ways of knowing are undermined by the imposition of dominant values (Freire, 1970).

Rey's call for intersectional, interdisciplinary adult CCE requires education to explore the deeper connection between CC and social and economic injustices. This type of education would be based on Freire's (1970) principles of critical consciousness, for as he wrote, 'To exist humanly, is to name the world, to change it.' (1970, p. 76). Current adult CCE, however, separates CC issues from oppressive systems such as patriarchy, colonialism and racism, thereby limiting humanising potential.

The technocratic focus on certification and measurable outcomes in FET reduces education to a function of preparing learners for the labour market (Allman, 2001). Focusing on green skills training in FET as a means to fulfil EU-dictated climate action targets corroborates Gramsci's argument that educational institutions serve as instruments of state

ideology. They reproduce dominant economic ideologies and forge compliant workers rather than empowered citizens with the capacity for critical thought. As Gramsci (1971, p. 10) dictated, 'Schools must train people who are capable of thinking, studying and ruling — not just obeying.'

The participants' observations on exclusion highlight that there is no space for counter-hegemonic action in the current iteration of adult CCE, most notably in Irish FET and community education spaces, which are often the preferred sites of learning for socially disadvantaged groups. According to FET in Numbers 2023: Lifelong Learning, 40.8% of learners were unemployed and 20.4% were inactive (including home duties, retired and trainees) prior to undertaking a course of study (The National FET Statistics, 2024). Community education, in particular, should provide a place for critical dialogue and grassroots empowerment.

Padme's 'pissing in the wind' comment poignantly articulates the frustration that adult educators feel regarding the disempowerment of themselves and their students when it comes to issues of CC. The lack of climate justice education at QQI Levels 1 – 6 exemplifies how structural inequalities in access to transformative learning are embedded in the system. As discussed in Chapter 2, education should provide 'the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.' (Freire, 1970, p. 34)

4.5 Theme 4: Positive Aspects of Current Climate Change Education

Despite the challenges facing CC education and the practitioners trying to make a difference, things appear to be shifting slightly towards a more holistic approach to the subject, which incorporates themes of climate justice. Leia acknowledges:

> We developed a tutor handbook called Climate Justice Education and Practice, which we disseminated nationally. We've also delivered three national trainings on how to use it, and it was purposely developed so that it could be a standalone course or a curriculum. Or it could be something that a communications or an interpersonal skills tutor dips in and out of, a gardening tutor, anybody,

Moreover, Rey states, 'That there is the possibility to access climate justice through the ETB is, with all of the multiple shortcomings and challenges, that is amazing.' Padme agrees,

> Like, I also delivered that course at the Climate Justice Level 3, which I think is not a bad course. It's nice in that it's not all about, you know, the individual. It is more about looking at things from a global perspective.' They also say, 'I think the content of the courses that we're delivering at FET level is good. There's lots of great information.

Padme also felt that the impact of this course was significant, stating, 'And I would say. Those 20 people you know… were definitely transformed by those courses.'

However, this movement may not be uniform across various ETBs, with some areas setting standards that other locations should strive to meet. Leia advises, 'We got research done and we'd over 1600 learners involved in climate justice programmes in the city of Dublin just for that academic year.' Padme advises, 'Cork ETB are great for supporting people who want to kind of push initiatives around climate change and so on.'

There are lots of ways in which people can receive messages about CC, and it does not necessarily have to be explicitly framed as CC education. In some areas, CCE has evolved from community craft courses into a more structured programme. Community education projects can give people space to get actively involved without having to wade through tonnes of facts. People are interested in and comfortable with areas like fast fashion and upcycling. Both Mando and Padme state that this can create the opportunity to engage in dialogue about CC, which can lead to a deeper understanding of the issues. As Padme says, 'I think those conversations are great to have in those classes where people say nothing's going to change, everything does change, and change happens faster than you think.'

Leia feels that even within individualism, there are areas where a difference can be made, such as around the problems of food waste. Being able to save money by reducing food waste is empowering for people living on a budget. Additionally, further development of the Introduction to Climate Justice Handbook is underway, with a chapter on Biodiversity to be added. This chapter was developed through the formation of a national consortium. When speaking about climate justice, Leia states, '(What we) encourage people to do is embed this where you can and where it's appropriate. And that's been really successful.'

Leia describes attending a micro-credentials Climate Leadership course at Trinity College, consisting of 80 – 90 learners. She suggests that people are flocking to these courses because they are inviting people to 'come learn about climate change with us,' and have pitched the course correctly. This third-level institution is encroaching on CCE for adults because the current FET provision is ineffective.

Analysis of Theme 4

Participants note that a move towards incorporating aspects of climate justice into CCE in specific settings is underway. This is a promising development, but it needs to be more widespread. Some educators and practitioners involved in CCE in further and higher education have moved away from individualised models and connect CC to other social structures, injustice and inequality. In adult, community and further education, the Climate Justice Handbook is a leading force in changing the face of CCE. Recently, a QQI Level 3 course was developed based on the content of this handbook, and it has been successfully delivered at various locations in Dublin and throughout the country. This course, while not overtly stating that capitalism is bad, draws the inference by showing how big fossil fuel companies are the worst polluters. The Introduction to Climate Justice course allows learners to explore ideas that 'The paradox of wealth in capitalist society is that it expands individual riches at the expense of public wealth, including the wealth of nature.' (Foster, York, & Clark, 2010, p. 12)

Participants hold learner-centred models, dialogue-based courses and flexible, community settings in high regard. These types of approaches align with Freirean pedagogy, which encourages educators to draw on learners' lived experiences. As stated in Chapter 2, Freire (1970, p. 80), explains that in learner-centred models, 'The teacher is no longer merely the-one-who-teaches'. This rejects the passive education of learners in banking models and calls for the co-creation of knowledge through dialogue. Freire (1985, p. 102) saw education as a collective act and advised, 'It would be extremely naïve to expect the dominant classes to develop a type of education that would enable subordinate classes to perceive social injustices critically.'

The participants infer that when CCE is conducted properly, it can have a profound impact on learners. Padme notes that learners who underwent the climate justice course were transformed. As this is a relatively new module, it is challenging to evaluate the overall impact on those who have completed the course. Further research is needed when the module is more widely available. However, Freire (1970, p. 39) links critical engagement to transformation, as mentioned in Chapter 2 and notes that a person who develops critical consciousness 'is not afraid to confront, to listen, to see the world unveiled. This person is not afraid to meet the people or to enter into dialogue with them'.

By providing learners access to CCE that draws on ideas of climate justice and acknowledges CC as a social issue, we present them with the opportunity to engage critically with the world. They are empowered to have a voice in the CC debate and to understand the

realities of power structures. They are given tools to engage with overarching systems and are afforded the opportunity to change them.

4.6 Theme 5: How to Develop Effective Climate Change Education

The participants in my research had many ideas about what constitutes effective adult CCE that allows learners to develop their critical thinking skills and see the connections between different aspects of CC.

Not A One Size Fits All Solution

Several participants acknowledge that the community's needs must be taken into account so that any development is relevant to the people involved. It is about building people's capacity for CC without making them anxious or wanting to switch off. Education must find a way to bring marginalised voices into the debate and allow open communication without conflict. People need to have an active voice which they can use when, for example, local councils are devising climate action plans. Mando was adamant that, 'It's about meeting people where they are at and giving them access to CCE that builds on their existing knowledge and helps them to make more sustainable choices.'

Leia agreed with this, saying, 'It's working, starting from where learners are. It's being really learner-centred,' while Han noted, 'The green transition has to be done in a way that's fair and equitable.'

Leia is interested in building people's critical literacy skills as a crucial step in allowing them to develop their own voice and participate in the climate debate. Han agrees, 'I suppose it's good for people to have a basic literacy in what they call, what they call ecological literacy.'

Leia feels this climate literacy building needs to come from the community sector, adult literacy services, and adult education services. 'It should be all of them working together, because we need to get people to question things, not take things for granted.'

There is also a need to consider where tutors are coming from and the extent of their knowledge about the subject. Some tutors have a Master's degree in environmental science, whereas others are artists and gardeners with an interest in CC. They will have very different approaches and delivery methods for content. This needs to be taken into account, as Leia says, 'I guess we've had such a strong focus on like not just working from where learners are at, but working from where tutors are at.'

Reframing Climate Change Education

Rey strongly believes that CCE needs to be reframed, moving away from scientific models that focus on individual actions. Mando agrees, saying, 'It needs to be framed in a different way so that people will want to get involved.'

Rey thinks CCE needs to be more intersectional, to cover areas around colonialism, patriarchy, racism and capitalism. That would require education becoming more radical, and bureaucratic barriers associated with the ETBs and government departments must be removed. Many good people are placed to deliver excellent climate justice education, but the curriculum needs to be redeveloped to focus on more than science. An interdisciplinary approach that draws on many viewpoints is the way forward. Padme points out, 'The level 4, that's all about kind of individual responsibility without that global perspective, they both need to happen.'

Anakin reiterates this by saying, 'If we see everything as connected and relational, and everything is political, then, then you can start to see and understand the complexities of things, but also, people get power to change.'

Leia believes that using a critical pedagogy enables connections to be made between structures. There needs to be a greater emphasis on Climate Justice and transforming our way of living as a society, including changing our consumerist lifestyles and economic models. As Yoda states, 'In relation to Justice, the world is entirely interconnected.'

Rey believes 'Climate science education really needs to include the social aspects, otherwise, it appears as if technical solutions will fix it.'

For Leia, there needs to be a variety of short and long courses that create pathways to other courses and embed CCE across everything from gardening to heritage, but also offer standalone courses. It is about creating diversity and choice for learners and tutors. Tutors need to be supported in this because, as Leia says, 'The motivation is high but the resources are often low.'

Many participants believe that community action can enable people to get involved in something that benefits their local area and provides a space to open up dialogue around issues such as food waste, organic growing, and the effects of certain types of farming. Within these settings, people learn without even realising it. Han thinks we could start framing it as community resilience, and Padme believes it can be achieved through project-driven, community-driven education. Perhaps using shorter courses that combine theory with practical applications would be better because, as Padme says, 'That's more meaningful for them than just changing their shopping habits, they need something more concrete than that.'

Rey and Padme also feel that space could be provided for people to process their emotions around CC and allow for more collective support for each other's needs. Initiatives like community gardens and community kitchens can help address the causes of CC and bring joy into people's lives. Leia thinks we can develop active hope, a kind of Freirean hope, as in critical consciousness. Rey notes that: 'Moving away from individual behaviour and towards collective action in Climate Change Education can be really empowering.''

Leia thinks it is about: 'giving people agency where they have it, and I also… I think it's about being really honest with people.'

While Mando asserts, 'I think we have to stop pointing fingers at different groups and all come together to work on a solution.'

Institutional Change

According to Leia, curriculum change and development need to be driven at a national level between ETBI and Solas. They believe that each ETB requires what is currently in place at Higher Education Institutes, i.e., someone at the director level driving CC educational responses, as well as within the institutions themselves. They could host learner festivals to engage learners and motivate staff to participate in green initiatives. PLD around CC needs to be ramped up, as when it is on offer, staff are quick to sign up. Padme feels that 'Centres themselves need to buy into the environmental sustainability message when they're teaching the courses.' Otherwise, learners may feel a disconnect between what is being taught and what is being practised.

Analysis of Theme 5

Most participants called for learner-centred, intersectional, critical and emotionally engaged adult CCE that fosters not only individual agency but collective action. These ideologies are rooted in a deeply Freirean pedagogy of freedom, where reflection and action lead to empowerment. In this case, education moves beyond the simple transmission of knowledge and becomes a transformative, dialogical process. As mentioned in Chapter 2, Freire (1970, p. 34) proposed that education either integrates young people into the present system, 'or it becomes the practice of freedom'

Freire's belief that education should be grounded in the learners' lived experiences and cultural understanding is echoed in the participants' insistence on meeting learners where they are and the rejection of a one-size-fits-all model. This quote also speaks to intersectionality.

Intersectional education is a framework for understanding multi-layered, complicated experiences of injustice and inequality in modern society. Intersectional approaches are crucial in providing a deeper understanding of how the experiences of different social groups are interconnected with issues of power, privilege, and oppression (Xuam, 2025). Identity, formed by interactions with society, in other words, lived experience, is linked to intersectionality (Wijeyesinghe & Jones, 2014). Therefore, intersectionality acknowledges Freire's notion of grounding education in the learner's lived experiences.

The mention of critical literacy ties in with Freire's concept of critical consciousness, where learners are encouraged to develop their skills in understanding and challenging the social, political and economic influences on what they perceive as reality. Climate literacy must be more than just scientific or technical knowledge. It must be a form of political literacy that enables people and communities to question structures of power that reinforce the climate crisis. According to Freire (1970, p. 66), 'It is absolutely essential that the oppressed participate in the revolutionary process with an increasingly critical awareness of their role as subjects of the transformation.'

Gramsci's (1971) concept of organic intellectuals can be a powerful lens for examining the focus on empowering both learners and educators. As Gramsci states, 'Every social group creates alongside itself, organically, one or more strata of intellectuals which give it homogeneity and an awareness of its own function' (1971, p. 5). Although participants did not specifically speak about organic intellectuals, recognising that tutors come from diverse backgrounds speaks to the organic intellectual model, where educators are not neutral givers of knowledge, but engaged participants who can nurture counter-hegemonic awareness in learners and communities. Anakin alludes to this when they mention 'people get power to change'. Leia also speaks about the hope that people can 'develop their own voice'.

The suggestion that adult CCE must be reframed to include critiques of colonialism, the economic system and inequality aligns with Freire's central themes of education as the practice of freedom. Freire is further acknowledged in the demand for critical literacy, which aligns with critical consciousness. Parallels can be drawn between Gramsci's development of organic intellectuals and this emphasis on critical literacy, allied with agency and embedded in communities. This may provide the perfect spawning ground from which individuals can emerge to challenge hegemonic norms.

References to structural change, institutional transformation and a critique of the economic system further support eco-Marxism's demand for real systemic revolution rather than the ostensible greening of capitalism. They view the destruction of the environment as

inextricably tied to capitalism's need to accumulate and exploit. As Foster (2020) insists, 'In our current growing recognition that there is no choice but to leave capitalism's burning house'.

CHAPTER 5

CONCLUSION

On YouTube, I follow Ocean Conservation Namibia (OCN), an organisation working to free Cape Fur seals from entanglements consisting of various types of discarded fishing gear, packaging straps, clothing and other detritus, which can cause severe injuries to the seals. I often hold my breath as the team races down the beach, nets in hand, and willingly puts itself in harm's way to relieve the suffering of these beautiful creatures. They also run education programmes in local schools and online campaigns to encourage people to do more to protect the ocean and all its life forms.

Recently, OCN posted online about the need for people to pressurise governments to designate more Marine Protected Areas to help our oceans recover from years of over-fishing. Someone commented that they could get behind this idea rather than the idea of some far-off climate emergency. I responded that I hated to break it to them, but the climate emergency was already here. This person retorted that they have a PhD in Physics and was emphatic that there is no climate emergency because the computer models do not support this scenario. They further stated that if I am not a scientist or physicist and do not comprehend computerised climate models, I am not entitled to a voice in the climate emergency debate. I would argue that my lived experience and the lived experiences of millions of people around the world confirm that the climate is changing at an alarming rate. This is negatively affecting our lives, our livelihoods and the prospects for generations to come.

5.1 Introduction

The following discussion is rooted in the analysis of research findings and framed by the five key themes: understanding CC; values inherent in current CCE; what is not working, what is working and how to develop effective CCE. Using the critical lenses of Freire, Gramsci and eco-Marxism to view these combined themes allows me to explore how adult CCE in Ireland can become more focused on justice and inclusion thereby presenting students with the opportunity to engage in transformative learning. This chapter also examines the implications of this research for CCE, adult education, and further research.

5.2 Discussion

Reframing Adult Climate Change Education

Current models of adult CCE focus on changing individual behaviour, making the education system complicit in deflecting attention from economic systems that serve the interests of those who hold power. Participants in the research acknowledge that individual action is necessary. However, Gramsci's (1971) hegemonic theory enables us to comprehend how this educational model perpetuates dominant views and obscures the actual cause of climate change. As Foster (2020) argues, climate justice cannot be addressed without altering economic relations that drive environmental destruction. The findings call for educational practices that incorporate Freirean pedagogy, which emphasises learner-centred, dialogical, and critical literacy, providing a counterpoint to current individualised models of CCE. Transformative, justice-orientated, community-based education provides space for counter-hegemony and the possible emergence of organic intellectuals. These approaches align with eco-Marxist critiques that advocate for systems change. Optimal educational models offer inclusive, intersectional, and politically conscious learning environments that foster critical awareness and collective action among adults.

Understanding Climate Change: Knowledge and Power

Participants described a general understanding of CC among their learners, often driven by lived experience. However, being unable to afford the proposed green solutions, such as organic food, electric cars, and solar panels, led to a sense of powerlessness, which kept them from engaging with CCE. From an eco-Marxist perspective, this could be seen as a type of alienation fuelled by the perceived inability to change the overarching systems of capitalism (Foster, York, & Clark, 2010). By applying Freire's concept of critical consciousness, it becomes clear that gaining a deeper understanding of CC requires more than just scientific facts. It must help learners identify the structural causes of environmental breakdown and enable them to understand their role within these systems. The participants' recognition of corporate control of media, leading to misinformation and skewed public discourse, aligns with Gramsci's cultural hegemony. When Gramsci (1971, p. 80) was writing, there was no internet, but he reflected that 'force will appear to be based on the consent of the majority, expressed by the so-called organs of public opinion'

Values Promoted by Current Adult Climate Change Education

From the interviews, it emerged that current CCE often promotes individualised, consumer-based solutions that promote recycling or changing to environmentally friendly products. These reflect neoliberal, market-based reforms and technocratic solutions led by scientists and technical experts, where the burden for change is placed on individuals rather than institutions or industries. Eco-Marxism would see these as false approaches that only serve to 'green' capitalism. As Foster, York & Clark (2010, p. 38) explain, 'New environmental technologies are adopted not on the basis of their value in creating a sustainable relation to the environment but on the basis of the profit considerations of corporations' Gramsci's (1971) hegemonic education explains how these values are normalised, while simply filling students with scientific and technical facts reflects Freire's (1970) banking model of education and precludes critical discourse.

What is Working: Community-Based and Relational Practice

Despite systemic challenges, participants noted that CCE, which is not necessarily termed CCE, often works best. Community-based and dialogical approaches, embedded in gardening, art, food projects, and even upcycling, foster a sense of agency and help connect theory to practice. This is reflective of Freire's (1970) concept of praxis, where reflection and action can build critical consciousness. A parallel may also be drawn to Gramsci's (1971) concept of organic intellectuals, where both educators and learners are embedded in communities and can articulate alternative worldviews.

How to Develop Effective CCE: Collective, Critical and Transformative

Participants were clear that effective CCE should be learner-centred, intersectional, and politically engaged. They stated that education must serve to connect CC to structures of oppression such as capitalism, colonialism and patriarchy and must provide opportunities for collective, rather than individual action. Freire's (1970) pedagogy of hope and critical literacy was a central tenet of this approach. Building counter-hegemonic educational spaces is crucial to challenging dominant narratives around CC. The participants highlighted the need for institutional reform to include curriculum revision and genuine sustainability practices within ETB settings. Without such a systemic overhaul, CCE may become just another tool of green capitalism.

Towards a Transformative Model of Adult Climate Change Education

The participants in this research have co-created findings highlighting significant tension within Ireland's current iteration of adult CCE. While some community and educational initiatives are beginning to adopt critical, climate justice-oriented approaches, the dominant model remains rooted in science-based, individualised, skills-focused, depoliticised content. Participants identified the limits of this framework, noting how it disempowers learners and excludes marginalised voices, particularly in the FET sector. In contrast, emerging practices rooted in Freirean pedagogy, which emphasises dialogue, learner-centredness, and critical literacy, offer a counter-hegemonic alternative that supports the development of climate justice education.

These practices echo the eco-Marxist critique of capitalist systems, underscoring the need for systemic, societal change, not merely behavioural adaptations. The participants' call for an inclusive, intersectional, and relational approach to climate education reinforces the need to reimagine adult learning spaces as transformative, participatory, and politically conscious. This suggests that truly effective adult CCE must move beyond knowledge transmission toward fostering collective action, critical awareness, and structural critique.

5.3 Limitations of the Study

The literature review was conducted over a limited period, spanning from September 2024 to May 2025. The interviews took place either through online Teams meetings or in person during January and February 2025. Time limitations are reflected in the number of participants it was possible to interview while completing a challenging academic programme. Delays were also imposed by the availability of participants, some of whom were involved in further study themselves and some of whom had demanding full-time jobs.

Adult CC education is an emerging field of research, so the gaps in existing knowledge, especially in an Irish setting, limited the pool of research I could draw from. Where possible, I looked for similar global and European studies.

5.4 Implications for Further Research

This thesis highlights the perceived inadequacy of the current iteration of CCE for adults. Community education has been suggested as one arena in which transformative CCE may flourish. A more in-depth study is needed to understand how we can develop inclusive, non-judgmental spaces for adults and adapt educational content to meet the specific needs of

varying groups. I have acknowledged the limits of my research; therefore, future studies could be conducted over an extended period, drawing on a larger pool of participants and including any dissenting voices. Engagement with learners may also provide insight into their stories of CC and CCE, leading to the co-creation of future CCE modules.

CC is generally accepted as a fact, and it is widely acknowledged that human activity is the primary driver of changes to the long-term planetary weather systems. I cannot make those statements unequivocally because there are still people who reject the idea of CC. They deny that our emissions are altering the climate because god controls the weather, the weather is cyclical, climate science is unreliable and other such arguments. In a world where misinformation is spread rapidly through social media and other online sites, it is easy for people to find a willing community for their anti-CC rhetoric.

I chose to look at current CCE through a Marxist lens. While this may be just one way of knowing, it was the right choice for me, and it served my research well. For me, CC cannot be uncoupled from injustice and inequality. The most vulnerable groups are paying the highest price for the destruction of our planet. Those who contribute most to the problem continue to drain the Earth of valuable resources, regardless of the cost. The type of CCE that predominates further education settings in Ireland leaves little room for Gramsci's anti-hegemony to thrive. Freire's critical consciousness is not fostered or encouraged by science-based, individualised modules. The narrow focus on sustainable development excludes the structural causes of CC, leading learners to believe that consumption can continue as long as we make a few behavioural changes. Eco-Marxism highlights capitalism's insatiable drive for growth, plundering natural resources and polluting nature's sinks. It holds 'green' choices up for scrutiny and points the finger at greenwashing.

5.5 Implications for the Field of Climate Change Education

Now more than ever, we need a compelling educational response to CC. It should not be siloed within Global Citizenship Education or Education for Sustainable Development. CCE, based on principles of Climate Justice, must be prioritised so that every learner has access to inclusive education that allows them to participate in society. Our world is in constant change, but if we lack the foundational knowledge to understand how these changes occur, we are excluded from contributing to solutions. CCE must build resilient communities that can act to combat the effects of CC.

5.6 Implications for the Practice of Adult Education

Analysis of the participants' views suggests approaches for future educational programmes that would critically engage adults with the causes of CC. Using critical pedagogies would lead to a more transformative experience for adult learners, which could benefit both them and their wider communities. A move away from individualisation and what Freire deemed the banking model of education is needed. Adult learners need more than scientific facts or details on how to recycle to become actively involved in the CC debate.

This thesis adds to the field of adult education by integrating critical pedagogies and Ecological Marxism in a uniquely Irish context. It highlights the structural limitations of current CCE provision while offering a practical framework for transformative, justice-orientated climate education.

5.7 Final Thoughts

When I embarked on this journey, I had no idea it would be so draining. I have always been interested in the environment and CC, but being hyper-aware leaves you open to every news article on the subject. At times, it felt like I was drowning in bad news, with notifications flashing up on my phone about the latest disasters, jarring US policies, and animals and people struggling to survive in conditions that are becoming increasingly untenable. In June 2025, I watched Sir David Attenborough's latest documentary, "Ocean." At times, I had to turn away from the screen when observing what we are doing to the very place that gave us life. Seeing massive ships in Antarctica scoop up krill before the whales can feed is devastating. And for what? For supplements that we probably do not even need.

It is easy to lose hope. However, throughout this research, I have met people who inspire, uplift and are ready to take on a challenge. Some educators want more for their students and themselves. Like Leia, they do not want to sell people a cod or teach them about recycling. They want to help them develop critical thinking skills so they have a voice in the CC debate. I realised that you do not have to chase seals down the beach to do something good for the planet. If passionate people working in adult education can inspire learners to think, question and act, there is hope. Most of us become adult educators because we want to make a difference. We are often constrained by bureaucracy, module descriptors and certification standards, yet we strive to make a difference. Imagine the impact we could make if we were given the freedom to explore new ways of presenting important issues like CCE.

So, like Yoda, I am trying to be less pessimistic. I have' started something small, started at some of the truths that are taken to be truths now'. Like David Attenborough, I choose to have hope that we can still turn things around if the will is there…

Bibliography

Allman, P. (2001). *Critical Education Against Global Capitalism : Karl Marx and Revolutionary Critical Education.* New York, USA: Bloomsbury Publishing USA. Retrieved March 28, 2025, from https://ebookcentral.proquest.com/lib/nuim/detail.action?docID=491597&pq-origsite=summon

Althusser, L. (1971). Ideology and ideological state apparatuses. In L. Althusser, *Lenin and philosophy and other essays* (pp. 127-186). New Yor: Monthly Review Press.

Ardoin, N. M., & Bowers, A. W. (2025). Collective action impacts on climate change mitigation. *Current Opinion in Behavioral Sciences, 63*, 101503. doi:10.1016/j.cobeha.2025.101503

Arndt, D. S., & LaDue, D. S. (2008). Applying concepts of adult education to improve weather and climate literacy. *Physical Geography, 29*(6), 487-499. doi:10.2747/0272-3646.29.6.487

Bachelet, M. (2018, January 18). Global Citizenship: A New and Vital Force. *UN Chronicle, LIV 2017*. doi:https://www.un.org/en/chronicle/article/global-citizenship-new-and-vital-force#:~:text=It%20was%20adopted%20by%20all%20Member%20States%20of,war%20crimes%2C%20ethnic%20cleansing%20and%20crimes%20against%20humanity.

Barton, R. (2024, December 23). *John Tyndall*. Retrieved January 20, 2025, from Britannica: https://www.britannica.com/science/heat-transfer

Beer, C. T. (2022). “Systems Change Not Climate Change”: Support for a Radical Shift Away from Capitalism at Mainstream U.S. Climate Change Protest Events. *The Sociological Quarterly, 63*(1), 175-198. doi:10.1080/00380253.2020.1842141

Benton, T. (1989). Marxism and Natural Limits: An Ecological Critique and Reconstruction. *New Left Review, 1*(178). Retrieved June 01, 2025, from https://newleftreview-org.may.idm.oclc.org/issues/i178/articles/ted-benton-marxism-and-natural-limits-an-ecological-critique-and-reconstruction

Benton, T. (2002). Review of Marx's Ecology: Materialism and Nature by J. B. Foster. *Monthly Review, 36*(1), 202-205. Retrieved June 9, 2025, from https://www-jstor-org.may.idm.oclc.org/stable/42856379?seq=1

Bindman, P. (2024, February 7). *Weekly data: bp and Shell’s spending on renewables flatlines in 2023*. Retrieved March 16, 2025, from energymonitor.ai: https://www.energymonitor.ai/finance/corporate-strategy/weekly-data-oil-majors-bp-and-shells-spending-on-renewables-flatlines-in-2023/?cf-view

Birchfield, V., & Freyberg-Inan, A. (2004). Organic intellectuals and counter-hegemonic politics in the age of globalisation: the case of ATTAC. In C. Eschle, & B. Maiguascha (Eds.), *Critical Theories, International Relations and 'the Anti-Globalisation Movement'* (1st ed.). London: Routledge.

Bolin, T. D. (2017). Struggling for democracy: Paulo Freire and transforming society through education. *Policy Futures in Education, 15*(6), 744-766. doi:10.1177/1478210317721311

Bowles, S., & Gintis, H. (2002). Schooling in Capitalist America Revisited. *Sociology of Education, 75*(1), 1-18. Retrieved May 31, 2025, from https://www-jstor-org.may.idm.oclc.org/stable/3090251?searchText=&searchUri=&ab_segments=&searchKey=&refreqid=fastly-default%3Ae5cac62466b6dbe5012eca84cb313538&initiator=recommender&seq=1

Brownstein, M., Kelly, D., & Madva, A. (2022). Individualism, Structuralism, and Climate Change. *Environmental Communication, 16*(2), 269-288. doi:10.1080/17524032.2021.1982745

Burkett, P. (2001). Marx's Ecology and the Limits of Contemporary Ecosocialism. *Capitalism, Nature, Socialism, 12*(2), 126-133. doi:10.1080/104557501101245036

Calma, J. (2025, March 25). *The Trump administration axes funding for climate impacts on health research*. Retrieved March 25, 2025, from theverge.com: https://www.theverge.com/news/635322/health-climate-change-funding-trump-nih-hhs

Chancel, L. (2022, September 29). Global carbon inequality over 1990–2019. *Nature Sustainability, 5*(11), 931-938. Retrieved March 31, 2025, from https://www.nature.com/articles/s41893-022-00955-z

Choto, A. T. (2025). Zimbabwe 1995–2000: rereading Gramsci's organic intellectual in contemporary working-class struggles. *Review of African Political Economy, 52*(138), 41-62. doi:10.62191/ROAPE-2025-0005

Clark, B., & Longo, S. B. (2018). Land Sea Ecological Rifts: A Metabolic Analysis of Nutrient Loading. *Monthly Review, 70*(3), 106-121. doi:10.14452/MR-070-03-2018-07_5

Clark, B., & York, R. (2005). Carbon metabolism: Global capitalism, climate change, and the biospheric rift. *Theory and Society, 34*(4), 391-428. doi:10.1007/s11186-005-1993-4

Clark, B., Foster, J. B., & Longo, S. B. (2018). Metabolic Rifts and the Ecological Crisis. In M. Vidal, T. Smith, T. Rotta, & P. Prew (Eds.), *The Oxford Handbook of Karl Marx* (pp. 652-658). Oxford: Oxford University Press. doi:10.1093/oxfordhb/9780190695545.001.0001

Clemitshaw, G. (2013). Critical Pedagogy as Educational Resistance: a post-structuralist reflection. *Power and Education, 5*(3), 268-279. doi:10.2304/power.2013.5.3.268

Daly, H. (2024, April 4). *Data centres are a serious threat to Ireland's carbon budgets*. Retrieved March 29, 2025, from irishtimes.com: https://www.irishtimes.com/environment/climate-crisis/2024/04/04/data-centres-are-a-serious-threat-to-irelands-carbon-budgets/

Das, L. (2022, April 12). *Greenwash: what it is and how not to fall for it*. Retrieved May 31, 2025, from greenpeace.org.uk: https://www.greenpeace.org.uk/news/what-is-greenwashing/

de Coninck, H. (2022). System change, not climate change. *Inaugural Speech*. Eindhoven: Eindhoven University of Technology. Retrieved May 25, 2025, from https://www.maastrichtuniversity.nl/sites/default/files/2023-03/coninck_2022_system_change_not_climate_change.pdf

Department of Education. (2024). *School Sector Climate Action Mandate 2024.* Department of Education. Dublin: Irish Government. Retrieved November 17, 2024, from https://www.gov.ie/pdf/?file=https://assets.gov.ie/310892/44071af9-7e23-4e8b-9539-3de54f1d3aa6.pdf#page=null

Department of Education and Science. (2000). Learning for Life: White Paper on Adult Education. Dublin: Stationery Office.

Dept of the Environment, Climate & Communications. (2022). *Just Transition Progress Reports*. Retrieved `March 4, 2025, from gov.ie: https://www.gov.ie/en/publication/e0e7e-climate-action-plan-to-tackle-climate-breakdown-just-transition/

Donnelly, B. (2008). The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses. (M. E. PETTENGER, Ed.) *Journal of Environmental Law, 20*(3), 486–489. doi:10.1093/jel/eqn016

Eckersley, R. (2013, September). Poles Apart?: The Social Construction of Responsibility for Climate Change in Australia and Norway. *Australian Journal of Politics & History, 59*(3), 382-396. doi:10.1111/ajph.12022

Engel-Di Mauro, S. (2024). *Ecosocialism.* London: Palgrave Macmillan.

Engel-DiMaurio, S. (2024). Ecological Marxism. In *Ecosocialism* (pp. 107-205). Palgrave MacMillan, Cham. Retrieved March 17, 2025, from https://link.springer.com/chapter/10.1007/978-3-031-74288-0_5?citationMarker=43dcd9a7-70db-4a1f-b0ae-981daa162054

Environmental Protection Agency. (2024, May 27). *Ireland is projected to exceed its National and EU climate targets*. Retrieved March 31, 2025, from epa.ie: https://www.epa.ie/news-releases/news-releases-2024/ireland-is-projected-to-exceed-its-national-and-eu-climate-targets.php

Fagan, R. (2025, February 26). *Vital that Just Transition funding made more accessible to local communities - Cowen*. Retrieved March 5, 2025, from westmeathexaminer.ie: https://www.westmeathexaminer.ie/2025/02/26/vital-that-just-transition-funding-made-more-accessible-to-local-communities-cowen/

Ferriter, D. (2025, May 30). *Ryanair is greenwashing to a comical degree*. Retrieved May 31, 2025, from irishtimes.com: https://www.irishtimes.com/opinion/2025/05/30/ryanair-is-greenwashing-to-a-comical-degree/

FitzGerald, J. (2024). *Climate change is pushed off the agenda in election campaign.* Dublin: The Irish Times. Retrieved November 21, 2024, from https://www.irishtimes.com/business/economy/2024/11/22/climate-change-is-pushed-off-the-agenda-in-election-campaign/

Fleming, J. R. (1999). Joseph Fourier, the 'greenhouse effect', and the quest for a universal theory of terrestrial temperatures. *Endeavour, 23*(2), 72-75. doi:10.1016/S0160-9327(99)01210-7

Foley, B. (2019). Intersectionality: A Marxist Critique. *New Labour Forum, 28*(3), 10-13. doi:0.1177/1095796019867944

Foster, J. B. (1992). The Absolute General Law of Environmental Degradation Under Capitalism. *Capitalism, Nature, Socialism, 3*(3), 77-81. doi:10.1080/10455759209358504

Foster, J. B. (1999). *The vulnerable planet: a short economic history of the environment* (2nd ed.). New York: Monthly Review Press.

Foster, J. B. (2015, October). *Marxism and Ecology: Common Fonts of a Great Transition.* Retrieved June 25, 2025, from Great Transition Initiative: https://greattransition.org/publication/marxism-and-ecology

Foster, J. B. (2020). Return of Nature and Marx's Ecology. *Monthly Review, 72*(7), 1-16. Retrieved June 23, 2025, from https://johnbellamyfoster.org/articles/return-of-nature-and-marxs-ecology/

Foster, J. B. (2023). Planned Degrowth: Ecosocialism and Sustainable Human Development—An Introduction. *Monthly Review*, 1-29. doi:10.14452/MR-075-03-2023-07_1

Foster, J. B., & Holleman, H. (2012). Weber and the Environment: Classical Foundations for a Postexemptionalist Sociology. *American Journal of Sociology, 117*(6), 1625-1673. doi:10.1086/664617

Foster, J. B., York, R., & Clark, B. (2010). *The Ecological Rift : Capitalism's War on the Earth.* New York: Monthly Review Press.

Freire, P. (1970). *Pedagogy of the Opressed* (2017 Reprint ed.). (M. Bergman, Trans.) London, England: Penguin Books.

Freire, P. (1985). *The Politics of Educaiton: Culture, Power and Liberation.* Massachusetts: Bergin & Garvey.

Fry, I. (2022, October 21). *Climate change the greatest threat the world has ever faced, UN expert warns*. (United Nations Office of the High Commissioner Human Rights) Retrieved June 7, 2025, from ohchr.org: https://www.ohchr.org/en/press-releases/2022/10/climate-change-greatest-threat-world-has-ever-faced-un-expert-warns

Funk, C., & Kennedy, B. (2016, October 4). *The Politics of Climate*. Retrieved March 16, 2025, from pewresearch.org.

Galletta, A. (2013). *Mastering the Semi-Structured Interview and Beyond : From Research Design to Analysis and Publication.* New York: New York University Press. Retrieved March 9, 2025, from https://ebookcentral.proquest.com/lib/nuim/detail.action?docID=1187368

Garlitz, D., & Zompetti, J. (2023). Critical theory as Post-Marxism: The Frankfurt School and beyond. *Educational Philosphy and Theory, 55*(2), 141-148.

Gill, S., & Law, D. (1993). Global hegemony and the structural power of capital. In *Gramsci, Historical Materialism and International Relations* (pp. 93-124). Cambridge: Cambridge University Press.

Giroux, H. A. (2010). Rethinking Education as the Practice of Freedom: Paulo Freire and the promise of critical pedagogy. *Policy Futures in Education, 8*(6), 715-721.

Government of Ireland. (2021). *Ireland's Education for Sustainable Development Strategy to 2030.* Dublin: Government of Ireland.

Government of Ireland. (2022a). *ESD to 2030: Second National Strategy on Education for Sustainable Development.* Dublin: Government of Ireland. Retrieved November 19, 2024, from https://www.gov.ie/pdf/?file=https://assets.gov.ie/228330/c69895a6-88f0-4132-b6d1-9085a9c31996.pdf#page=null

Government of Ireland. (2022b). *Ireland's Second National Implementation Plan for the Sustainable Development Goals 2022-2024.* Dublin: Government of Ireland. Retrieved March 31, 2025, from https://www.gov.ie/pdf/?file=https://assets.gov.ie/238357/74386d7f-167d-402e-82b9-4eb71b3077db.pdf#page=null

Graham-Leigh, E. (2020, June 2). *Climate change requires system change.* Retrieved March 18, 2025, from theecologist.org: https://theecologist.org/2020/jun/02/climate-change-requires-system-change

Gramsci, A. (1971). *Selections From The Prison Notebooks Of Antonio Gramsci.* (Q. Hoare, & G. Nowell-Smith, Eds.) New York, USA: International Publishers.

Gramsci, A. (1977). *Selections from political writings (1910-1920).* London: Lawrence and Wishart.

Harford, J., Fleming, B., & Hyland, A. (2024). 100 years of inequality?: Irish educational policy since the foundation of the state. *Paedagogica Historica, 60*(4), 726-741. doi:10.1080/00309230.2022.2155979

Holm, P., & Travis, C. (2017, September). The New Human Condition and Climate Change: Humanities and Social Science Perceptions of Threat. *Global and Planetary Change, 156*, 112-114. doi:10.1016/j.gloplacha.2017.08.013

Hornborg, A. (2024). Radical Perspectives on Climate Change: From Critical Theory to Eco-Marxism and Beyond. *Oxford Research Encyclopedia of Climate Science*. doi:10.1093/acrefore/9780190228620.013.937

Humphrey, M. (2002). New Marx for Old? Marxism, Humanity, and Ecology. *Oxford Academic*, 128-178. doi:10.1093/0199242674.003.0005

Hussey, S. (2025, February 25). *EU funding of almost €6m for midlands community projects*. Retrieved March 5, 2025, from rte.ie: https://www.rte.ie/news/regional/2025/0225/1498730-midlands-eu/

IPCC. (2025). *History of the IPCC*. Retrieved February 16, 2025, from IPCC: https://www.ipcc.ch/about/history/

IPCC Working Group. (2022). *Climate Change 2022: Mitigation of climate change.* Geneva: Intergovernmental Panel on Climate Change. Retrieved March 28, 2025, from https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/

Irish Mirror. (2024, November 24). *The Irish Mirror General Election 2024 Survey*. Retrieved November 24, 2024, from irishmirror.ie: https://www.irishmirror.ie/news/irish-news/ex-fianna-fail-minister-explains-34199440

Jackson Lears, T. J. (1985). The Concept of Cultural Hegemony: Problems and Possibilities. *The American Historical Review, 90*(3), 567-593. Retrieved March 31, 2025, from https://www.csun.edu/~rdavids/301fall08/301readings/Jackson-Lears_on_Gramsci.pdf

Kester, K., & Aryoubi, H. (2019). Paulo Freire: Citizenship and Education. In A. Petersen, G. Stahl, & H. Soong (Eds.), *The Palgrave Handbook of Citizenship and Education* (pp. 1-17). London: Palgrave Macmillan.

Kirby, P., & O'Mahony, T. (2017). *The Political Economy of the Low-Carbon Transition.* Palgrave Macmillan Cham. doi:10.1007/978-3-319-62554-6

KPMG. (2025). *Home*. Retrieved February 21, 2025, from kpmg.com: https://kpmg.com/ie/en/home.html

Kulaeva, Z. (2024, November 14). Narratives of change: how climate change narratives have evolved since the 1970s. *International Journal of Climate Change Strategies and Management, 17*(1), 376-394. doi:10.1108/IJCCSM-06-2024-0089

Leff, E. (2021). Marxism and the Environmental Question: Towards an Environmental Rationality for Sustainability. In *Political Ecology* (pp. 165-208). Palgrave Macmillan, Cham. Retrieved March 18, 2025, from https://link.springer.com/chapter/10.1007/978-3-030-63325-7_7?citationMarker=43dcd9a7-70db-4a1f-b0ae-981daa162054#citeas

Leonardo, Z. (2025). Teachers as critical anti-intellectuals: Edward Said. *Globalisation, Societies and Education*, 1-7. doi:10.1080/14767724.2024.2446730

Lim, W. M. (2024). What Is Qualitative Research? An Overview and Guidelines. *Australasian Marketing Journal, 33*(2), 199-229. doi:10.1177/14413582241264619

Mahony, M., & Endfield, G. (2018, February 2). Climate and colonialism. (M. Heymann, & M. Hulme, Eds.) *WIREs Climate Change, 9*(2), e510. doi:10.1002/wcc.510

Malm, A. (2018). *The Progress of This Storm:.* London: Verso Books.

Manojan, K. P. (2019). Capturing the Gramscian Project in Critical Pedagogy: Towards a Philosophy of Praxis in Education. *Review of Development and Change*, 123-145. doi:10.1177/0972266119831133

Marlon, J., Jefferson, M., Goddard, E., Verner, M., Carman, J., O'Mahony, D., . . . Leiserowitz, A. (2023). *Climate Change's Four Irelands and the Irish Climate Opinion Maps, 2023.* Yale University, Yale Program on Climate Change Communication. New Haven: Yale University. Retrieved November 21, 2024, from https://climatecommunication.yale.edu/publications/climate-changes-four-irelands-and-the-irish-climate-opinion-maps-2023/

Marx, K. (1976). *Capital, Volume 1.* New York: Vintage Books.

Mason, Hayes & Curran. (2024, June 19). *Facilitating Data Centre Demand in Ireland*. Retrieved May 31, 2025, from mhc.ie: https://www.mhc.ie/latest/insights/facilitating-data-centre-demand-in-ireland#:~:text=We%20have%2082%20data%20centres%20in%20Ireland%2C%20with,more%2C%20meaning%20a%2065%25%20growth%20in%20coming%20years.

Mayo, P. (1999). Freire, Gramsci and Adult Education: possibilities for transformative action. In C. A. Torres, & P. Noguera (Eds.), *Social Justice Education for Teachers. Paulo Freire and the Possible Dream.* Rotterdam/Boston/Tapei: Sense Publishers. Retrieved June 01, 2025, from https://www.academia.edu/717139/Freire_Gramsci_and_Adult_Education_possibilities_for_transformative_action

Mayo, P. (2008). Antonio Gramsci and his Relevance for . *Educational Philosophy and Theory, 40*(3), 418-435. doi:10.1111/j.1469-5812.2007.00357.x

Mayo, P. (2014). Gramsci and the politics of education. *Capital and Class, 38*(2), 385-398. doi:10.1177/0309816814533170

Mercer, H., & Simpson, T. (2023, June 21). Imperialism, colonialism, and climate change science. (M. Heymann, & G. Doffek, Eds.) *WIREs Climate Change, 14*(6), e851. doi:10.1002/wcc.851

Mochizuki, Y., & Bryan, A. (2015, June 4). Climate Change Education in the Context of Education for Sustainable Development: Rationale and Principles. *Journal of Education for Sustainable Development, 9*(1), 4-26. doi:10.1177/0973408215569109

Murray, S. (2021, November 1). *How climate change became political*. Retrieved March 12, 2025, from www.ft.com: https://www.ft.com/content/4bac715b-2812-4610-a528-dc8db9ecd635

Nusche, D., Fuster Rabella, M., & Lauterbach, D. (2024, February 12). Rethinking Education in the Context of Climate Change: Leverage Points for Transformative Change. *OECD Education Working Paper No 307*. Paris, France: Directorate for Education and Skills.

O'Brien, C. (2023, June 20). *Ireland ranked as second most competitive economy*. Retrieved March 25, 2025, from irishtimes.com: https://www.irishtimes.com/business/2023/06/20/ireland-ranked-as-second-most-competitive-economy/

O'Connell, J. (2019, November 26). *Life after peat: Men of the bog – and proud of it*. Retrieved March 5, 2025, from irishtimes.com: https://www.bing.com/search?pglt=43&q=what+is+the+bog+near+edenderry&cvid=84910a66c2a44c9d9a8ef4302596e859&gs_lcrp=EgRlZGdlKgYIABBFGDkyBggAEEUYOTIGCAEQABhAMgYIAhAAGEAyBggDEAAYQDIICAQQ6QcY_FXSAQg1MDU0ajBqMagCALACAA&FORM=ANNAB1&DAF0=1&PC=U531&ntref=1

O'Doherty, C. (2023, December 30). *Era of peat-fired electricity ends as Edenderry power plant switches fully to burning biomass*. Retrieved March 4, 2025, from Independent.ie: https://www.independent.ie/irish-news/era-of-peat-fired-electricity-ends-as-edenderry-power-plant-switches-fully-to-burning-biomass/a184309624.html

O'Doherty, C. (2024). *Irish leaders' commitment to climate is questioned by top scientists as Cop29 begins.* Dublin: The Irish Independent. Retrieved November 21, 2024, from https://www.independent.ie/irish-news/elections-2024/irish-leaders-commitment-to-climate-is-questioned-by-top-scientists-as-cop29-begins/a377783925.html

Osanloo, A. F. (2023). Antonio Francesco Gramsci: The Origins and Originator of the Concept of Hegemony. In B. A. Geier (Ed.), *The Palgrave Handbook of Educational Thinkers* (pp. 1-11). London: Palgrave Macmillan Cham. doi:10.1007/978-3-030-81037-5_90-1

O'Sullivan, K. (2024). *Cop29 failure unacceptable, even if climate slips from political priorities, warns Eamon Ryan.* Dublin: The Irish Independent. Retrieved November 14, 2024, from https://www.irishtimes.com/environment/climate-crisis/2024/11/13/cop29-failure-unacceptable-even-if-climate-slips-from-political-priorities-warns-eamon-ryan/

Pallas, C. L. (2012). Identity, Individualism, and Activism beyond the State: Examining the Impacts of Global Citizenship. *Global Society, 26*(2), 169-189. doi:10.1080/13600826.2012.656264

Park, J. T. (2015). Climate Change and Capitalism. *Consilience: The Journal of Sustainable Development, 14*, 189-206. Retrieved May 25, 2025, from https://www.jstor.org/stable/26188749?seq=1

Pessu, T. R. (2019, July-August). Understanding Research Paradigms: An Ontological Perspective. *Journal of Research & Method in Education, 9*(4), 38-40. doi: 10.9790/1959-0904033840

Piccolo, A. L. (2025, March). The Influence of Collective Action: A Relational Perspective on the Consequences of Social Movements and Grassroots Politics. *Sociology Compass, 19*(3), e70052. doi:10.1111/soc4.70052

Price, J. C., Walker, I. A., & Boschetti, F. (2014). Measuring cultural values and beliefs about environment to identify their role in climate change responses. *Journal of Environmental Psychology, 37*, 8-20. doi:10.1016/j.jenvp.2013.10.001

Reibold, K. (2023, August). Settler Colonialism, Decolonization, and Climate Change. *Applied Philosophy, 40*(4), 624-641. doi:10.1111/japp.12573

Rodriguez Velazquez, V. (2025, March 23). *The Trump administration's climate policies jeopardize research in disaster-prone Puerto Rico*. Retrieved March 25, 2025, from msn.com: https://www.msn.com/en-us/news/politics/the-trump-administration-s-climate-policies-jeopardize-research-in-disaster-prone-puerto-rico/ar-AA1Bufy9?ocid=BingNewsSerp

Root, T. (2025, March 07). *Oil companies are dropping renewable goals — and more importantly, expanding fossil fuels*. Retrieved March 25, 2025, from grist.org: https://grist.org/energy/oil-companies-are-dropping-renewable-goals-and-more-importantly-expanding-fossil-fuels/

Sachs, J. D., Lafortune, G., & Fuller, G. (2024). *The SDGs and the UN Summit of the Future: Sustainable Development Report 2024.* United Nations. Dublin: Dublin University Press. doi:10.25546/108572

Saed. (2019). James Richard O'Connor's Ecological Marxism*. *Capitalism Nature Socialism, 30*(4), 1-12. doi:10.1080/10455752.2018.1495307

Schugurensky, D. (2000). Adult Education and Social Transformation: On Gramsci, Freire, and the Challenge of Comparing Comparisons. *Comparative Education Review, 44*(4), 515-522. doi:10.1086/447632

Scotlands' International Development Alliance. (2024). *What is global citizenship*. Retrieved February 04, 2025, from Scotlands' International Development Alliance: https://intdevalliance.scot/global-citizenship-education/what-is-global-citizenship/

Scoville-Simonds, M. (2018, October). Climate, the Earth, and God – Entangled narratives of cultural and climatic change in the Peruvian Andes. *World Development, 110*, 345-359. doi:10.1016/j.worlddev.2018.06.012

Security Council, U. (2021, February 23). *Climate Change 'Biggest Threat Modern Humans Have Ever Faced', World-Renowned Naturalist Tells Security Council, Calls for Greater Global Cooperation*. Retrieved November 20, 2024, from UN Meetings Coverage and Press Releases: https://press.un.org/en/2021/sc14445.doc.htm

Shabecoff, P. (1988, March 29). Temperature For World Rises Sharply In the 1980's. *The New York Times*, Section C P 1. New York. Retrieved November 20, 2024, from https://www.nytimes.com/1988/03/29/science/temperature-for-world-rises-sharply-in-the-1980-s.html#

Shannon, D. (2019). A Tale of a Discursive Shift: Analysing EU Policy Discourses in Irish Adult Education Policy -- From the "White Paper" to the "Further Education and Training Strategy". *The Irish Journal of Adult and Community Education*, 98-117.

Share, P., Tovey, H., & Corcoran, M. P. (2007). *A Sociology of Ireland* (3rd ed.). Dublin: Gill & Macmillan Ltd.

Slevin, A., & Barry, J. (2024, March 28). Reconciling Ireland's climate ambitions with climate policy and practice: challenges, contradictions and barriers. *International Environmental Agreements: Politics, Law and Economics, 24*, 29-48. doi:10.1007/s10784-024-09632-2

Social Justice Ireland. (2025, March 24). *Sustainable Progress Index 2025: Environment*. Retrieved March 25, 2025, from socialjusticeireland.ie: https://www.socialjustice.ie/article/sustainable-progress-index-2025-environment

Solas. (2014). Further Education and Training Strategy. Dublin: SOLAS.

Solas. (2024, October). *Green Skills 2030*. Retrieved February 21, 2025, from solas.ie: https://www.solas.ie/programmes/green-skills/

Stehr, N., & von Storch, H. (1995). The social construct of climate and climate change. *Climate Research, 5*(2), 99-105. Retrieved March 8, 2025, from https://www.jstor.org/stable/24863408?saml_data=eyJzYW1sVG9rZW4iOiIwOGMwNjhjZS01NGNjLTQ1M2ItOTg0Ni1lNjg0ZjE5NjM3MDgiLCJpbnN0aXR1dGlvbklkcyI6WyI0YjFkOGZiZS0wYWU5LTRmMDctYTIyMi0wNWZhOWE3YTBlOTYiXX0&seq=1

Strajn, D. (2025). Adult education and difference. *International Review of Education, 71*, 361-364. doi:10.1007/s11159-025-10131-y

Suzina, A. C., & Tufte, T. (2020). Freire's vision of development and social change: Past experiences, present challenges and perspectives for the future. *International Communication Gazette, 82*(5), 411-424. doi:10.1177/1748048520943692

The National FET Statistics. (2024). *FET in Numbers 2023: Lifelong Learning.* Dublin: Solas. Retrieved June 20, 2025, from https://a.storyblok.com/f/70398/x/b5a4b7dd06/lifelong-learning-fet_report-2023.pdf

Trott, C. D., Lam, S., Roncker, J., Gray, E.-S., Courtney, R. H., & Even, T. L. (2023). Justice in climate change education: a systematic review. *Environmental Education Research, 29*(11), 1535–1572. doi:10.1080/13504622.2023.2181265

UN. (2015). *Transforming our world: The 2030 Agenda For Sustainable Development .* Paris: United Nations. Retrieved November 17, 2024, from https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf?ref

UN. (2020, July 14). *Climate Action*. Retrieved November 10, 2024, from United Nations: https://www.un.org/en/climatechange/climate-solutions/education-key-addressing-climate-change

UN Department of Economic and Social Affairs. (2025). *Do you know all 17 SDGs?* Retrieved June 9, 2025, from sdgs.un.org/goals: https://sdgs.un.org/goals

UNESCO. (2022, June 2). Adult learning and education for sustainable development: A transformative agenda. *CONFINTEA VII*. Paris.

UNESCO. (2024, October 23). *What you need to know about education for sustainable development*. Retrieved March 31, 2025, from unesco.org: https://www.unesco.org/en/sustainable-development/education/need-know

UNESCO. (2025). *Climate Change Education*. Retrieved May 29, 2025, from unesco.org: https://www.unesco.org/en/climate-change/education

United Nations. (2025, January 10). *UN News*. Retrieved February 04, 2025, from United Nations: https://news.un.org/en/story/2025/01/1158891

USEPA. (2023, August 14). *EPA Report Shows Disproportionate Impacts of Climate Change on Socially Vulnerable Populations in the United States*. Retrieved June 25, 2025, from United States Environmenal Protection Agency: https://www.epa.gov/newsreleases/epa-report-shows-disproportionate-impacts-climate-change-socially-vulnerable

Waldron, F., Mallon, B., Barry, M., Sainz, M., & Gabriela. (2020). Climate Change Education in Ireland; Emerging Practice in a Context of Resistance. In D. Robbins, D. Torney, & P. Brereton (Eds.), *Ireland and the Climate Crisis* (pp. 231-243). Cham, Switzerland: Springer International Publishing AG.

Walling, M. (2025, January 17). *What to know about Trump's first executive actions on climate and environment*. Retrieved March 24, 2025, from apnews.com: https://apnews.com/article/trump-executive-orders-climate-change-environmental-policy-e4fb2b2495c0bcf880fab46605936b09

Walters, S. (2018, November 1). 'The drought is my teacher': Adult learning and education in times of climate crisis. *Journal of Vocational, Adult and Continuing Education and Training*, 146-162. doi:10.14426/jovacet.vlil.308

Weart, S. R. (2008). *The Discovery of Global Warming : Revised and Expanded Edition.* Cambridge: Harvard University Press. Retrieved September 20, 2024, from https://ebookcentral.proquest.com/lib/nuim/detail.action?docID=3301406&pq-origsite=summon#

Weart, S. R. (2024, April). *The Discovery of Global Warming Introduction and Summary:*. Retrieved January 20, 2025, from AIP: https://history.aip.org/climate/summary.htm

Wijeyesinghe, C. L., & Jones, S. R. (2014). Intersectionality, identity, and systems of power and inequality. In D. J. Mitchell, J. Marie, & T. L. Steele (Eds.), *Intersectionality and higher education: Theory, research, and praxis* (pp. 9-19). New York: Peter Lang.

World Bank Group. (2025, April 9). *Social Dimensions of Climate Change*. Retrieved June 25, 2025, from worldbank.org: https://www.worldbank.org/en/topic/social-dimensions-of-climate-change

Wrigley, T. (2021). Theories of global warming and their implications for education: reflections on Andreas Malm's 'The progress of this storm'. *Discourse: Studies in the Cultural Politics of Education, 44*(2), 322-336. doi:10.1080/01596306.2021.1987195

Xuam, R. P. (2025). Mapping trends and demographics in research on intersectional education and pedagogy: a scoping review (2020–2024). *Intercultural Education, 36*(4), 384-402. doi:10.1080/14675986.2025.2480507

APPENDIX 1

Proposed questions for Climate Change Education Research

1. Tell me about your experiences of Climate Change Education.
2. In your view, what values are being promoted in the current iteration of Climate Change Education?
3. In your view, what are the positives in the current iteration of Climate Change Education?
4. What is not working? What are the challenges?
5. What do you think we need to do to develop/deliver effective Climate Change Education?

APPENDIX 2

Maynooth University
National University of Ireland Maynooth

ERASMUS MUNDUS INTERNATIONAL MASTER
ADULT EDUCATION FOR SOCIAL CHANGE

Department of Adult and Community Education

Ethical Approval Form

Brief Title of Thesis	**The Role of Adult & Further Education in promoting Climate Change Education in Ireland**
Student name:	**Audrey Hayes**
Supervisor(s):	**Michael Murray**

Research Methods Please outline
• Proposed methodology • Methods of data collection • Types of analysis
Qualitative methods Interviews Thematic content analysis and narrative analysis

Participants Please outline
• Who will take part? • Where will the research take place? • How will you gain access to or recruit participants? • Does your research involve gatekeepers?
People involved in setting curriculums or developing modules for Adult Ed and FE (Solas, ETBs) People involved in delivering Climate Change or GCE education (Saolta, Tutors)

The research will take place in locations that are suitable to the participants

I intend to gain access through contacts I have within the LOETB and Saolta. I do not yet have any contacts in Solas, so these will need to be developed through networking.

Access to some organisations may involve gatekeepers.

Demonstration of Ethical Considerations

Please outline the ethical issues which will need to be managed during the course of the thesis. You need to consider relevant research integrity, GDPR, and ethics policies in your discussion.

Please discuss

- What ethical issues do you anticipate to encounter in the course of your research?
- How you will obtain informed consent?
- How you will ensure that participants are protected and sensitively managed?
- What types of power relationships (student/employee/employer/colleague etc.?) exist in the research and what steps will you take to manage these?
- If gatekeepers are involved, what procedures have been agreed?
- How will you limit the collection of personal and sensitive data?
- How will you anonymise the data?
- How will you secure the data?
- How and when will the data be destroyed on completion of the MEd?
- Any other issues that you consider important or that your supervisors have raised in discussions?

- I intend to abide by the research standards set out in the Policy Statement on Ensuring Research Integrity in Ireland. I commit to conducting research that is reliable, honest, respectful and accountable. During the research I will set aside my own biases and follow where the data leads.
- Ethical considerations include protecting the rights of the participants, ensuring confidentiality and allowing participants to withdraw at any time.
- I will be aware of the needs of the participants and ensure they are informed of the scope of the research through the Participant Information Sheet.
- Consent will be obtained via the signed consent form.
- I don't anticipate unequal power relationships during research, but I intend to hold interviews at a place dictated by the participants where they feel at ease.
- I don't yet know if gatekeepers are involved, so I cannot speak to this issue at this stage
- I will advise the participants that they should only share what they are comfortable with. If we go off topic I will redirect. If the participant is upset I will bring the interview to a close.
- Participants will be identified by initials only in my thesis.

- I will store the data, including typed transcripts on my password-protected laptop. Audio files will also be uploaded to this device. All information will be uploaded to my Maynooth Microsoft Account and files will not be stored directly on the device.
- All files will be destroyed once my Med is completed.

Please append a copy of your information sheet and consent form to participants.

Further information on Maynooth Research ethics policies is available here
https://www.maynoothuniversity.ie/research/research-development-office/ethics/ethics-general-policy-documents

Declarations

I confirm that the statements above describe the ethical issues that will need to be managed during the course of this research activity.

Postgraduate Student	**Signature: Audrey Hayes** **Date: 18/11/2024**
MU course director	**Signature:** **Date:**

Please email a copy of your completed ethics form to your supervisor and cc
Michael.J.Murray@mu.ie; angela.mcginn@mu.ie

You will receive a reply within 10 days of submitting the form

For Department Use

Supervisor use only:

Date Considered: _____

Approved ☐

Approved with recommendations (see below) ☐

Referred back to applicant ☐

Referred to Department Research Ethics Committee ☐

Recommendations:

APPENDIX 3

PARTICIPANT INFORMATION SHEET

Department of Adult & Community Education, Maynooth University

The Role of Adult & Further Education in promoting Climate Change Education in Ireland

Introduction

My name is Audrey Hayes and I am a Master's student with the Department of Adult & Community Education, Maynooth University. My contact number is 085 7397774 and my email is audrey.hayes.2024@mumail.ie. The contact number for the Department of Adult & Community Education is 01 708 6062/3784/3752/3937.

What is the purpose of this research?

As a party to the UN Framework Convention on Climate Change (UNFCCC), the Irish government has agreed to raise climate change awareness through education and access to information. The purpose of this research is to explore existing Adult & Further Education courses that focus on climate change. I want to uncover what the sector is doing well, where gaps exist and what needs to be done to address any shortfall in providing comprehensive climate change education.

Do you have to take part?

Participation in this research is voluntary. Choosing not to participate or deciding to withdraw from the research there will be no adverse effects. You can withdraw your consent to participate at any time.

What will you do in the research?

You will be asked to participate in an interview with the researcher at a time and place that is convenient for you.

Why have you been invited to participate?

I want to hear from individuals involved in planning curriculums and developing climate change modules for delivery in Adult and Further Education settings. I would also like to explore the experiences of those delivering climate change education.

What are the potential risks to you taking part?

I don't anticipate any risks to people taking part in this research.

What happens to the information collected during the research?

All information collected is confidential and will be used anonymously in my thesis. All personal data will be processed in accordance with GDPR procedures.

Thank you for reading this information. Please do not hesitate to ask questions if you need clarification on any point.

RESEARCH CONSENT FORM

The Role of Adult & Further Education in promoting Climate Change Education in Ireland

Department of Adult & Community Education, Maynooth

I confirm that I have read and understood the information about the project as provided in the Participant Information Sheet.

I confirm that I have had the opportunity to ask questions and that the researcher has answered my questions about the study to my satisfaction.

I understand that my participation is voluntary and that I am free to withdraw from the project at any time, without giving a reason and without consequences.

I understand that I can withdraw my data from the study at any time.

I understand that any information recorded during the research will remain confidential and no information identifying me will be made publicly available.

I consent to the use of data in research, publications, sharing and archiving as explained in the Participant Information Sheet.

I consent to an audio recording of the interview.

I agree to take part in the above research.

_____	_____	_____
Name of Participant	Date	Signature

_____	_____	_____
Name of Researcher	Date	Signature