

Young People, Twenty-First Century Skills and Uncertain Futures: A Genealogy of Australia's Neo-Liberal Education Apparatus

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Young People, Twenty-First Century Skills and Uncertain Futures: A Genealogy of Australia's Neo-Liberal Education Apparatus

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BA, GradDipEd (Secondary)

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Declaration



I certify the following about the thesis entitled *Young People, Twenty-First Century Skills and Uncertain Futures: A Genealogy of Australia's Neo-Liberal Education Apparatus,* submitted for the degree of Doctor of Philosophy (Education)

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Authorship Statement

Some elements of this thesis have been previously published elsewhere.

Chloe, Michael and Ruth's stories have been published in a book chapter titled "'Being young', 'living well', in/beyond the pandemic: Exploring the entanglements between COVID-19, the Anthropocene and young people's wellbeing" for an edited collection titled *Wellbeing: Global Policies and Perspectives* (Kelly, Brown & Goring, 2022b). These stories are presented as first published.

Rosie, Ash and Astrid's stories have been published in the *Journal of Youth Studies.* This article is titled "COVID-19 and young people's 'Future Presents': lockdown stories from the Anthropocene" (Kelly, Brown & Goring, 2022a). These stories are presented as first published.

In addition, some of the data and discussions in this thesis have informed, or been informed by, book chapters and journal articles that have been developed and published alongside this thesis. These publications are cited where necessary throughout this thesis.

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Abstract

This thesis, structured in three parts, develops a genealogical examination of the everyday practices, routines, systems and discourses that structure the problem of young people, uncertain futures, education and the concept of twenty-first century skills in what I identify as Australia's neo-liberal education apparatus.

In Part One, I develop an account of a genealogical ethos that draws on the work of Michel Foucault, to then develop an archaeological account of the neo-liberal problematisation of "young people" and the purposes of Australia's schooling systems during the last four decades. Part Two explores relations of power/knowledge/subjects that shape those discourses that suggest that young people need to be educated to become more enterprising and aspirational in relation to uncertain futures in Australia's neo-liberal education apparatus. In Part Three I provide further analysis of those relations of power/knowledge/subjects which promise to develop youthful subjects with a particular orientation to uncertain futures that are framed by globalising understandings of the Fourth Industrial Revolution and Sustainable Development.

This thesis is also partly framed by six Interludes that draw on the stories of six young people who participated in a research project titled "COVID-19 Recovery Scenarios for Young People in Melbourne's Inner North". As I discuss in the Prelude, these stories are included because they have become "entangled" with the work of this PhD project.

As an artefact of a genealogical practice and ethos, this thesis is a partial and limited history that aims to function as a starting point for additional genealogies, and for thinking differently about the relations of power/knowledge/subjects which give shape to dominant ways of knowing, governing and educating young people in relation to uncertain futures.

Acronyms and Abbreviations

4IR	Fourth Industrial Revolution
ABC	Australian Broadcasting Commission
ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum Assessment and Reporting Authority
ACTU	Australian Council of Trade Unions
AEC	Australian Education Council
AI	artificial intelligence
AMWU	Australian Manufacturing Workers' Union
ATAR	Australian Tertiary Admissions Rank
AT21CS	Assessment and Teaching of 21st Century Skills
CAF	Council for the Australian Federation
CEDEFOP	European Centre for the Development of Vocational Training
CEO	chief executive officer
Centrelink	Delivers income support and other payments to Australians
CERI	Centre for Educational Research and Innovation
COAG	Council of Australian Governments
CPI	Consumer Price Index
CRL	Centre for Real-World Learning
CSF	*Curriculum and Standards Framework*
DEET	Australian Department of Employment, Education and Training
DESD	Decade of Education for Sustainable Development
EC	Education Council
ESCO	European Skills/Competencies Qualifications and Occupations
ESD	Education for Sustainable Development
ESFC	Employment and Skills Formation Council
ESPAS	European Strategy and Policy Analysis System
FFF	Fridays for Future
FYA	Foundation for Young Australians
GCM	Global Education Cooperation Mechanism
GDP	gross domestic product
GFC	Global Financial Crisis
HECS	Higher Education Contribution Scheme
IBE	International Bureau of Education
ICT	Information and Communication Technology
ILO	International Labour Organisation
INLLEN	Inner Northern Local Learning and Employment Network
INYET	Inner North Youth Employment Taskforce
IPBES	Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
LGA	local government area
LGBT	lesbian, gay, bisexual and trans
LGBTQI	lesbian, gay, bisexual, trans, queer and intersex
LSAY	Longitudinal Survey of Australian Youth
MCEECDYA	Ministerial Council for Education, Early Childhood Development and Youth Affairs

MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
MCTEE	Ministerial Council for Tertiary Education and Employment
MCVTE	Ministerial Council for Vocational and Technical Education
MDG	Millennium Development Goal
MOOC	Massive Open Online Course Provider
MOVEET	Council of Ministers of Vocational Education, Employment and Training
NAPLAN	National Assessment Program – Literacy and Numeracy
Newstart allowance	An income support payment that provides financial assistance to people aged 22 years or older but under pension age who are unemployed or treated as unemployed in Australia
NGO	non-government organisation
OECD	Organisation for Economic Cooperation and Development
OEEC	Organisation for European Economic Co-operation
PD	Professional development
PE	private equity
PISA	Programme for International Student Assessment
RBA	Reserve Bank of Australia
RMIT	Royal Melbourne Institute of Technology
SDG	Sustainable Development Goal
SF	speculative fabulations
SS4C	School Strikes for Climate
STEM	science, technology, engineering and mathematics
TAB	Totaliser Agency Board
TAFE	Technical and Further Education
TALIS	Teaching and Learning International Survey
TDC	Trade Development Council
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
VBS	Victorian Board of Studies
VC	Venture Capital
VCAA	Victorian Curriculum and Assessment Authority
VCE	Victorian Certificate of Education
VELS	*Victorian Essential Learning Standards*
VET	Vocational Education and Training
WCED	World Commission on Environment and Development
WEF	World Economic Forum
WWII	World War II
YMC	Youth Ministers Council

Prelude

This thesis takes a genealogical approach to examine the conditions that have enabled discourses of twenty-first century skills to emerge, and to mobilise particular understandings of young people, education, and futures. The study is situated within the context of the global crises of the climate and earth systems, of capitalism and its profound global and regional inequalities, and the COVID-19 pandemic.

In an interview in *Technologies of the Self*, Michel Foucault (1988a, pp. 11–12) was asked about the "profound emotional undercurrents" in his work, for example, "anguish" (in *Discipline and Punish*, 1977b), "scorn" and "hope" (in *The Order of Things*, 1973), "outrage and sadness" (in *Madness and Civilization*, 1988b). Foucault (1988a, pp. 11–12) responded:

> Each of my works is a part of my own biography. For one or another reason I had the occasion to feel and live those things. To take a simple example, I used to work in a psychiatric hospital in the 1950s. After having studied philosophy, I wanted to see what madness was: I had been mad enough to study reason; I was reasonable enough to study madness. I was free to move from the patients to the attendants, for I had no precise role. It was the time of the blooming of neurosurgery, the beginning of psychopharmacology, the reign of the traditional institution. At first I accepted things as necessary, but then after three months (I am slow-minded!), I asked, "What is the necessity of these things?" After three years I left the job and went to Sweden in great personal discomfort and started to write a history of these practices.

I was born into a working-middle-class family in a coastal town in regional Victoria, Australia, and was educated at a Catholic primary school, a boys' Catholic secondary school and was the first in my family to attend University. I identify as a cis-gender man of "Australian" and Irish heritage and want to acknowledge the mobility and privilege that all of these elements have afforded me. The experience of living, schooling, training, and higher education in Australia and Sweden as both a student and professional, along with working with others from a diversity of cultures and places, environments and perspectives, has influenced and shaped my own capacities to ask questions such as "what is the necessity of

these things (twenty-first century skills)?" This work is born of, and informed by, these elements and tensions, angst and anxiety about what it means to be a young person, an adult, and about the promises, the purposes, and the futures of education, work, and the sustainability of life on the planet.

In this context I have chosen to include, and amplify, the stories of a number of young people that I encountered during 2020, 2021 and 2022 as participants and co-producers of knowledge in a number of research projects that I made active contributions to as a Research Fellow. In this Prelude, I describe why I have chosen to do this, where their stories come from, and my intent that they can speak to aspects of the arguments that I develop at certain points. I would also like this Prelude to be understood as a partial reflexivity and positionality statement. What follows is a story about how I have come to be doing this research, and the role that this genealogy has played in shaping the projects that are "entangled" with it.

During 2018, I led a project at a university in the western suburbs of Melbourne (Victoria, Australia), whose aim was to development of a series of micro-credentials to enable undergraduate students to evidence and exhibit participation in co-curricular activities. The rationale behind the project was that if students could build a digital portfolio of evidence of twenty-first century skills (in addition to their undergraduate coursework) then they would be better equipped to find meaningful employment in the future. The project was informed by a document which framed the graduate employment strategy for the university during that time period and this document included a reproduction of the visual representation of twenty-first century skills produced in the World Economic Forum's (WEF) *New Vision for Education* report (2015, p. 3). This particular image (see Figure P.1) includes the foundational literacies, competencies and character qualities which make up what the WEF identifies as twenty-first century skills for lifelong learning in the twenty-first century.

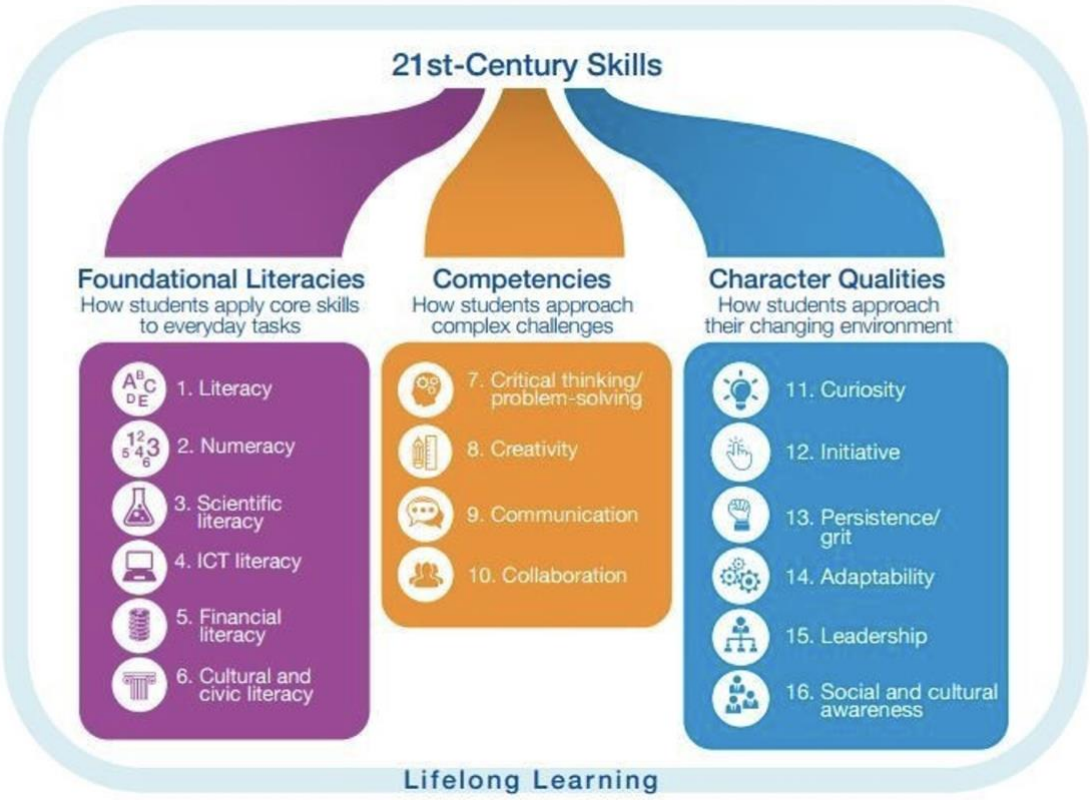


Figure P.1 Twenty-first Century Skills (WEF, 2015, p. 3)

This model of the skills that individuals need is positioned as a solution to the problem of an uncertain future, precarious work, the age of acceleration, and the Fourth Industrial Revolution (WEF, 2020a). Visual representations such as those produced by the WEF, and also by the Foundation for Young Australians (FYA), and the Organisation for Economic Cooperation and Development (OECD), became significant figures in shaping my work in that project, and in the design of interventions to improve graduate employment outcomes. These representations relate to the work of this thesis, because they condense much of what can be said about contemporary education, skills and futures in this context, and gesture towards the knowledges subjugated in their emergence. After leaving that project on twenty-first century skills, I continued, during 2019, to work on the implementation of other projects related to education, skills and workforce development for existing and emerging industries in the post-industrial regional centre of Geelong, in regional Victoria.

Doing the genealogical work of this thesis has strengthened my understanding of the conditions that enable these ways of knowing young people, education and futures to take shape, circulate and gain authority. Against this backdrop of pragmatic work on skills-focused projects, and in identifying and analysing the archive in which this genealogy has been situated, it became clear that the voices of young people are often marginalised from stakeholder networks and discussions which shape education and futures.

At the beginning of 2020, the SARS-CoV-2 virus and the COVID-19 disease that it causes, was emerging as a pandemic as it spread rapidly across the world. The pandemic has since produced, and continues to produce, death and suffering on a grand scale. It has also had a profound impact on economies worldwide, overwhelmed health systems and amplified pre-existing fault lines of inequality, disproportionately impacting populations of marginalised, vulnerable and disadvantaged young people in different places (Kelly, Brown & Goring, 2022a). As my colleagues and I argue, from early on in the pandemic, it was clear that young people would carry a heavy burden in a COVID-normal world as they did in the face of austerity measures during the aftermath of the 2007–2009 Global Financial Crisis (GFC) (Kelly & Pike, 2017; Howie & Campbell, 2016).

In response to, and in trying to make sense of the pandemic as it was unfolding in 2020, the Inner Northern Local Learning and Employment Network (INLLEN) approached RMIT University to develop a place-based, action research project in the inner northern suburbs of Melbourne.[1] The project aimed to engage with a range of schools, youth service providers

[1] In the state of Victoria, Australia, there is a government-funded network of 31 Learning and Employment Networks (LLENs) that aim to connect schools, education and community service providers with local businesses and industry stakeholders to support young people (10–19 years old) with their education, employment and training pathways and outcomes. Each LLEN operates at the regional level, and they are managed through the Department of Education and Training (DET). For more information about the LLEN network, see: https://www.vic.gov.au/local-learning-and-employment-network. For more information about the Inner Northern LLEN, see: http://inllen.org.au/. Annelise Kamp (2013) has also examined some of the limits

and local government stakeholders in interviews and a workshop to produce a series of COVID recovery scenarios for young people in the inner north of Melbourne. I was a PhD candidate at RMIT at the time, and my supervisor, Professor Peter Kelly, and his colleague Dr Seth Brown, were the RMIT project leads. I was employed as a Research Fellow on this project.

Drawing on discussions with Peter Kelly, Seth Brown, David Kennedy (the CEO of INLLEN) and his team and myself, the project engaged young people living in the inner northern suburbs of Melbourne as key stakeholders in the design of a series of possible future scenarios. We used the video-capture platform (Video Ask) to conduct video interviews with 53 young people during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections during August–November 2020. Video Ask interviews could be completed on any device, at any time, and in a number of formats, including video, audio and text. The project was shaped by a scenario planning methodology and had a future orientation to the year 2025.[2] The approach taken to engaging with, listening to, and amplifying the voices of the young people involved in this project, provided an opportunity for me to respond to some of the silences and subjugated knowledges that were emerging from the data in the genealogical work I was doing during that time. The video capture format was chosen to provide a private space for young people to share their stories and concerns. The young people were encouraged to spend some time considering what they

and possibilities of these kinds of collaborative agendas, networks and partnerships in her book, *Rethinking Learning Networks.*

[2] Scenario planning is a widely used methodology which seeks to imagine a range of possible futures. For Sascha Meinert (2014, p. 7) an "important characteristic of the scenario method lies in its explicit inclusion of uncertainties and its comparison of development alternatives that could shape the course of events". Importantly, the scenario planning methodology is not about predicting the future, as a definite, predictable thing or "eventuality". Instead, scenarios emerge "amidst the realities of today and the mid- to long-term uncertainties" (Meinert, 2014, p. 7).

might say to camera prior to responding to the following four interview prompts and questions:

1. Personal details – We want to know a little about you and where you live and what you do.
2. The Present and COVID-19's impact on your life – We want to know what impact COVID has had on you and your family and friends.
3. The future and your thoughts and feelings about it – We want to know a little about what you think the world will be like in 2025.
4. Your future and your hopes and aspirations – We want to know a little about your hopes and aspirations for your future.

My contribution to this project included working with all stakeholders and young people to develop video-based engagement to the series of research prompts and questions. I worked with organisations to support an inclusive and diverse, but not representative cohort of young people to participate in the project. This involved working with particular stakeholder organisations to consider how best to engage culturally and linguistically diverse young people, LGBTQI and gender diverse young people, young people experiencing unemployment, First Nations young people, and young people with disability to have their voices heard. The following points provide some details on the sample of young people who participated:

1. Participants were aged 16–24, however, most were aged 17–19.
2. 13 identified themselves as "unemployed".
3. 4 identified loss or reduction of work hours due to COVID-19.
4. 26 female, 21 male, 1 gender non-binary (5 interviews were unusable for various reasons).

5. 4 identified they received support from Australia's National Disability Insurance Scheme (NDIS).
6. 22 secondary school students participating in Victorian Certificate of Education (VCE) or Victorian Certificate of Applied Learning (VCAL).
7. 5 were enrolled in a University course, 2 were enrolled at TAFE.
8. 10 explicitly referenced their cultural or linguistic background.
9. 2 identified their home/living situation in terms of "at-risk", and 1 identified as living in social housing (Kelly, Brown & Goring, 2022a).

The young people involved in this project told a series of hopeful, uncertain, anxious and despairing stories about their lives in the context of that moment during COVID-19 lockdown, and about their hopes and aspirations for their futures. This element of the project bought young people's thoughts about the future into conversation with service providers, schools and community leaders and produced three scenarios: a chaotic future (the future we want to avoid); an unsustainable future (the future we are likely to get); and a sustainable future (the future we hope for).[3] It provided an opportunity to rethink how young people are engaged as stakeholders in their own futures in these spaces, and in this context of crisis and disruption.

Since developing that project, Peter Kelly, Seth Brown and I have developed a number of other projects aimed at amplifying young people's voices in conversations about education, training and work, health and wellbeing, community and livelihoods in places such as the Greater Geelong region. This three-year, longitudinal project (2021, 2022, 2023) has

[3] Further explanation of the research methodologies and methods used to gather and analyse interview data can be found in the book chapter and journal article in which these six stories have been published. For the full report and video interviews from the project "COVID-19 Recovery Scenario's for Young People in Melbourne's Inner North" see the following link: https://youngpeoplesfutureslab.org/project/melbournes-inner-north/

involved engaging 50 young people in video interviews, in order to map their education, training and employment aspirations and trajectories in socio-ecologies that are profoundly shaped by historical and contemporary processes of disadvantage and marginalisation.[4]

These projects and this genealogical research have become profoundly entangled, and reflexively inform each other. Over the past years of developing this PhD research, I had not intended to produce interview data. However, in the final stages of writing, it has become clear, and important, that some of the voices of the young people that I have been working with should be included and amplified in the spaces created in this research. Consequently, this document is, in its final iteration, partly framed by six Interludes. These Interludes comprise the stories of six of the young people who participated in the INLLEN project in 2020–2021. These include Rosie, Chloe, Michael, Ruth, Astrid and Ash's stories. These stories are presented as first published (as indicated), and the data comprising the stories were gathered under the human ethics approval processes that RMIT granted the INLLEN project. I played a lead role in the processes that led to the gathering of these "data", and a significant role in the "authorship" that led to the gathering and production of these publications, including the stories we used, and the arguments we made.

Importantly, the stories are included in this document because they have emerged and been told, have become entangled, with the work of this PhD project. "Entanglement" (Haraway, 2016, p. 34), a concept that has been developed in new materialist and posthuman discourses, is suggestive of the complex relationships and connections between multiple and diverse material and discursive elements. For Donna Haraway (2016, p. 58) sympoietic entanglement

[4] For further details about, and video interviews from the project "COVID-19 and Young People's Education and Employment Aspirations: A 3 Year Study in Geelong" see the following link: https://youngpeoplesfutureslab.org/project/greater-geelong/

"means 'making with'. Nothing makes it itself; nothing is really auto-poietic or self-organizing". It is in this sense that this research, its elements, these stories, and the projects that have emerged alongside them are entangled, are intimately connected, and are shaped by one another. Entanglement is a concept that enables an engagement with, as John Law describes, "elusive realities" (2004, p. 6). Law suggests (2004, p. 6) that this involves:

> creating metaphors and images for what is impossible or barely possible, unthinkable or almost unthinkable. Slippery, indistinct, elusive, complex, diffuse, messy, textured, vague, unspecific, confused, disordered, emotional, painful, pleasurable, hopeful, horrific, lost, redeemed, visionary, angelic, demonic, mundane, intuitive, sliding and unpredictable.

Drawing on the work of Haraway (2016) and Law (2004), the inclusion of these stories in this thesis has a number of purposes. First, they function as a form of story-telling which can provide a way to explore the "entanglements" which give shape to young people's lives. And, to engage with the complexities and messiness of these entanglements, so often made absent in policy discourses focused on technical, skills-based solutions to human- and techno-centric narratives of the future and of crisis.[5] Second, they are illustrative of some of the concerns, anxieties, uncertainties, and hopes that young people in a particular place (Melbourne's inner north) gave voice to when provided with an opportunity to respond to questions about their presents and futures.

My aim is that the Interludes in this thesis can also pose a challenge to the representational logics which underpin, for example, the WEF's models of skills and futures, and traditional

[5] I refer to both "complexity" and "messiness" in the context of young people's stories, and throughout this thesis. John Law (2004) has discussed the significance of working with and alongside "mess" in social science research in his book, *After Method.* Annemarie Mol and John Law (2002) have also published an edited collection titled *Complexities: social studies of knowledge practices,* which includes various studies of ways of relating to "complexity" and complexity in practice. The collection includes engagement with concepts such as multiplicity, ebbs and flows, complex wholes in science, and moral complexity. While a detailed engagement with these concepts is beyond the scope of this thesis, this work enables me, along with Haraway's concept of "entanglement", to signify the "slippery, indistinct, elusive, complex, diffuse, messy, textured" character of these "data".

approaches to qualitative research. In an Introduction to *Non-Representational Methodologies: Re-Envisioning Research*, Phillip Vannini (2015, p. 15) claims that at the core of non-representational research is "the ethos of animation" through "diverse ways of knowing", which can "enliven rather than report", "render rather than represent, to resonate rather than validate, to rupture and reimagine rather than to faithfully describe, to generate possibilities of encounter rather than construct representative ideal types". Vannini (2015, p. 15) also suggests that "If indeed there is a quintessential non-representational style, then it is that of becoming entangled in relations and objects rather than studying their structures and symbolic meanings". Drawing on Vannini (2015) and also Julia Coffey's (2022) work, these Interludes are an effort to illustrate the affective dimensions and entanglements between the researcher and the researched, and the ways in which this genealogy has shaped and been shaped by my engagement with stakeholders, and young people in supporting these young people to share their hopes, aspirations, anxieties and uncertainties about their presents and futures.[6]

In this sense, these stories also bring something of an allegorical, metaphorical, figurative element to this research. For John Law (2000, p. 2), story-telling is a performative practice which can "make a difference", when the writer is attentive to the positionality that they inhabit:

> stories, effective stories, perform themselves into the material world – yes, in the form of social relations, but also in the form of machines, architectural arrangements, bodies, and all the rest. This means that one way of imagining the world is that it is a set of (pretty disorderly) stories that intersect and interfere with one another. It means

[6] In her exploration of the embodied dimensions of young people's wellbeing, Julia Coffey (2022, p. 72) argues that "whilst representations can never be fully left behind, the main point is that representational analysis should not be the endpoint for our understandings of complex social processes related to embodiment". Coffey's (2022, p. 71) work provides a way of understanding the entanglement of myself as researcher, this genealogical project, the projects that emerged alongside it, the young people involved, the stories told, our lives and the socio-ecologies that shape them. In the Coda, I revisit Coffey's work, and develop a discussion of non-representational approaches and affective entanglement.

> also that these are, however, not simply narrations in the standard linguistic sense of the term.

The subjugated knowledges, silences and absences identified and discussed in this thesis, do not come from "nowhere" or from some "god-trick" space (Haraway, 2016). My thinking about the shape of this genealogy has become entangled with these projects, and these stories. While the kinds of evidence-based global policies, reports, and programs discussed in this thesis can be appropriate genres and forms of knowledge production, they do tend to displace the idea of story-telling (and bodies, places, feelings and experiences) in favour of an abstract truthfulness (Law, 2000). This aim of introducing disorderly stories also speaks to the wider aims of the genealogical project of making "disorderly and tattered genealogies", and to "reactivate local knowledges" (Foucault, 1997b, p. 10). Maria Tamboukou (1999, p. 210) has expanded on these aims and suggested that a genealogical, historical project such as this one, "renders itself effective when it develops the ability to distinguish singularities, acknowledge differences, decentre man [sic] as the subject of historical becoming and shatter the certainties of our very existence". These aims are revisited in the Coda to this thesis.

Each story, as an Interlude, follows the chapter with which the young person's story most closely resonates, and I make some brief remarks about the significance of the story to that work in each Interlude. While Rosie, Chloe, Michael, Ruth, Astrid and Ash's stories are not the only examples or illustrations that could be included here, they speak, in various ways, to the knowledges discussed in this thesis. And, quite possibly, provide a starting point for thinking differently about relations of power/knowledge/subjects which can contribute to discourses of education, young people, and socially just and sustainable presents and futures (Braidotti & Hlavajova, 2018; Haraway, 2016; Braidotti, 2019).

Introduction

This thesis takes a genealogical approach to examine the historical emergence of Australia's neo-liberal education apparatus, and the ways in which particular discourses of young people, twenty-first century skills and uncertain futures are condensed and mobilised in this apparatus.[7] I aim to identify and analyse the dominant relations between power, knowledge and subjectivity that are produced and reproduced in relation to young people, education and uncertain futures in the present moment. I discuss what these discourses do, who produces them, how they are produced, and who/what they aim to serve.

In this introduction I outline some of the dominant ways in which young people, education and their uncertain futures have been produced in contemporary policy discourses which have been influential across global north economies since the 1960s, and in "development" contexts in the global south. The global organisations, networks and policies discussed in this Introduction are important because they have become significant elements in shaping a contemporary education apparatus in Australia. I aim to introduce some of the broader tensions that emerge where Australian and global governmental organisations have become entangled as key stakeholders in defining the challenges of the future, the subjects imagined as best equipped to manage those futures, and the role of education in producing these

[7] A definition and discussion of "neo-liberalism" and "apparatus" are developed in detail throughout Chapter One and Chapter Two. Some detail is provided here by way of Introduction. Throughout this thesis, neo-liberalism is understood not only as a set of economic and political policy reforms, but also as discourses for thinking about ways of governing social, cultural, economic and political life, and the forms of subjectivity that individuals need to practice to succeed in these contexts. For Steger and Roy (2010, p. 12) neo-liberal logics are "rooted in entrepreneurial values such as competitiveness, self-interest, and decentralisation. It celebrates individual empowerment, and the devolution of central state power to smaller localised units". Throughout this thesis, apparatus (in French, *dispositif*) acts as a signifier and an analytical tool for gathering and examining the complexity of the dispersed material and discursive elements and power relations, knowledge practices and discourses, actors and institutions, which are combined to serve the strategic aims and needs of neo-liberal governmentalities.

relations. The organisations, discourses, policies, stakeholders and events outlined in this Introduction are revisited, in greater detail throughout this document.

Governing Young People: Enterprise, Aspiration and Twenty-First Century Skills

Over the past 40 or so years, knowledges of the behaviours and dispositions, capabilities, skills and future orientations of individual young people have become the locus of governmental intervention for dealing with the problem of an uncertain future. Young people's "social skills, their understanding of others, their ability to adapt and learn from challenges and change" (Lucas & Smith, 2018, p. iv), and have been imagined by Australian education policy thinktanks such as The Mitchell Institute as central to addressing these concerns. In a publication by the Mitchell Institute called *The Capable Country: Cultivating capabilities in Australian education*, Bill Lucas and Charlene Smith (2018, iv) argue that:

> the degree to which individuals thrive is bound up with the relationships, ideas and events that comprise their education. In large part, their success relies on how well they grasp the "how" of learning, what it looks like to be a curious, creative, problem solving, team player.

In order to navigate an uncertain and precarious future, young people have been imagined as needing to develop curiosity, imagination, resilience, particular forms of self-regulation, twenty-first century, transferable enterprise skills, and the right kinds of dreams and aspirations. As I demonstrate throughout this thesis, these influential discourses have emerged from, and been widely reproduced, throughout globalised education policy networks, across OECD economies, and through the dispersed elements of a complex and strategic, neo-liberal education apparatus in Australia. These discourses of young people's skills take on a different shape and deploy different keywords in different spaces; however, they are intimately connected. The OECD's (2018, p. 5) *The Future We Want* report, as part of the Future of Education and Skills 2030 series, identifies; for example, three

"transformative competencies" that young people are imagined as needing in the present and future. They include "Creating new value", "Reconciling tensions and dilemmas" and "Taking responsibility".

The behaviours and dispositions of self-investment, self-regulation, self-advocacy, individual responsibility and self-management also emerge as key elements in twenty-first century skills models, and future-focused models of young people and education. I do not argue that these individual behaviours and dispositions are not worthwhile, or indeed important behaviours and orientations to cultivate. However, I do examine how and why these behaviours and dispositions have been made knowable in these ways, in different forums, and the limits and possibilities that they produce for understanding what individuals must be and become as young subjects of these discourses. My intention is to identify and analyse the relations of power and knowledge and subjectivity which give shape to these discourses of twenty-first century skills and to make visible the contingency to these truth claims.

The WEF's representation of the literacies, competencies, and character traits that comprise a suite of twenty-first century skills (see Figure P.1) are also named as transferable skills, enterprise skills, soft skills, and employability skills in other forums. These skills range from financial literacy to resilience, self-awareness and cultural competence, critical thinking and creativity, entrepreneurship and aspiration. They are skills, dispositions and behaviours that are imagined as indicating an individual's ability to navigate uncertainty, flexible and precarious work, digital disruption, and a global economy of knowledge and innovation.

Twenty-first century skills models which define the behaviours and dispositions of individual young people, intersect with research, declarations, and assessment tools aimed at reform to education and schooling systems (see for example, the *Hobart, Adelaide, Melbourne* and *Alice Springs (Mparntwe)* declarations discussed in Chapter Two). Bill Lucas, Guy Claxton

and Ellen Spencer, for example, have developed a five-dimensional model of creativity to be used as a prototype for assessment of this skill in the Programme for International Student Assessment (PISA, 2022a) across eight countries including China, USA, England and Finland. Lucas, Claxton and Spencer (2013) produced a detailed discussion of the research, methods and evidence which informed this prototype in an OECD Education Working Paper No. 86 titled *Progression in Student Creativity in School: First Steps Towards New Forms of Formative Assessments.* Lucas and colleagues are based at the Centre for Real-World Learning (CRL) at the University of Winchester (UK), and their work focusses on the implementation and assessment of dispositional teaching in schools. The rationale for their work on dispositional teaching research at the University of Winchester (University of Winchester, 2022, n.p.) emphasises the importance of "teaching methods that impact on the development of positive dispositions in learners which are likely to help them thrive in the real world […] such dispositions as perseverance, effective reflection, seeking/acting on feedback and being able to adapt to change". In addition to the OECD's Programme for International Student Assessment (PISA), Lucas and his colleagues have collaborated with the Mitchell Institute (Victoria University), an education and health policy think tank in Melbourne, Australia. Their work is one example of the ways in which policy discourse focused on transformation to education systems and young people's behaviours and dispositions, circulate through global networks of government and non-government organisations, think tanks, reporting mechanisms, academics, institutions and schools. This thesis aims to contribute to these kinds of conversations a detailed analysis of some of the theories, knowledge practices, relations and rationalities which give shape to these ways of knowing and governing young people, education and futures.

Within these networks, human behaviours and dispositions are understood as forms of capital to be developed and exchanged. Stephen Ball (2009, p. 213) argues that these processes are

causing the emergence of "a depthless, flexible, lonely, responsive and responsible learner (collectively represented as human capital), devoid of 'sociality,' the ultimate commodification of the social". Shoshana Zuboff (2019, p. 39) also states that while these skills, behaviours and dispositions are worthwhile, they should not be understood as an inherently and unquestionable good thing, because they signal the emergence of a behaviour economy:

> human behavior is becoming a commodity – quantified, standardised, packaged and traded, much as consumer data is today. This commoditisation, combined with the maturing of disciplines such as behavioral economics and affective computing, will give companies and governments the ability to influence and shape our behavior as never before.

In the face of these very different understandings of young people, education and futures, Rosi Braidotti's (2019, p. 125) observation and analysis of the "posthuman subject" and her "affirmative ethics" offers much in terms of potential for a radical, just and sustainable rethinking of these relations. The posthuman subject is an "embodied and embedded" subject which "illuminates the potentialities and becomings in learning environments, where experimentation in education gives rise to unforeseen but productive and inventive processes rather than predetermined outcomes" (Braidotti & Hlavajova, 2018, p. 396). Within this framework, young people's being and becoming is imagined "not…[as]…an inherent property of individuals", but as an "assemblage; a complexity of networks of human and non-human actors" (2018, pp. 396–397).

Problematisations of education and young people as needing to produce and become enterprising and aspirational subjects, are historically contingent truth claims. Part Two analyses some of the logics, networks, and relations of power/knowledge/subjects which give shape to these ways of knowing and governing young people.

Governing Futures: The Fourth Industrial Revolution (4IR) and Sustainable Development

These same global networks of organisations, businesses and governments produce futures as a set of social, economic and environmental challenges (OECD, 2018, p. 1), and new worlds of work characterised by automation, globalisation and collaboration (FYA, 2015a). These futures, made knowable as complex, challenging and uncertain, enable the production of solutions, such as the suggested development of individuals, communities, organisations and businesses to become "ready and open" for these futures (OECD, 2018, p. 1). Within these and related networks and documents, these futures are regarded as producing an abundance of "opportunity", "for higher productivity jobs, but also more creative, independent and meaningful employment" for those who can mobilise in response to contemporary skills interventions, through education, training and work (FYA, 2015a, p. 3).

Education systems and practices, teachers, pedagogies and the young (and old) people that engage with them, are encouraged to adapt to these imagined futures through the development of particular behaviours, dispositions and skills. Young people in particular have been imagined as needing to develop twenty-first century, transferable skills such as creativity, resilience, optimism and enterprise and aspirations for the jobs of the future. Schools have been imagined as places which must prepare young people "for jobs that have not yet been created, for technologies that have not yet been invented, to solve problems that have not yet been anticipated" (OECD, 2018, p. 2). Young people are encouraged to "learn enterprise skills now to prepare them for the economy of the future, so they can become job creators, not just job seekers, and navigate more complex careers" (FYA, 2016a, p. 1). These behaviours and dispositions are understood, within these networks, as best suited to navigate the complex challenges, crises and uncertainties of the future. For the OECD and FYA, for example, young people's skills have emerged as a significant point of intervention for

managing digital disruption, labour market change and the economic, social and environmental crises of the present and the future. In *What is the Future?* John Urry (2016, p. 2) argues that:

> This futures orientation is big and significant business for companies like Google or Shell, environmental organisations such as the Intergovernmental Panel on Climate Change (IPCC) or Forum for the Future, government bodies like Foresight in the UK or the European Strategy and Policy Analysis System (ESPAS) in the EU, military organisations such as the Pentagon, academic bodies such as the Oxford Martin School or the Tyndall Centre, and very many others.

Global policy stakeholders such as the OECD, the United Nations (UN), The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the WEF have also made significant investment in the production of futures. Across global policy organisations and government bodies, keywords such as the twenty-first century, the Fourth Industrial Revolution (4IR), and Sustainable Development have figured prominently among the most influential discourses in shaping knowledge of the futures that young people and education systems must manage.

In his book *Keywords: A Vocabulary of Society and Culture*, Raymond Williams (1976) describes how the keywords that we use to make sense of the world, morph, change and take on new meanings in ways that reflect the political moment and values of our societies. Williams (1976, pp. 87–93) describes how meanings are transformed and taken up in different intellectual disciplines and across different systems of thought. In this sense, terms such as the twenty-first century, the 4IR and Sustainable Development do not hold universal meaning, but are historically situated artefacts which signify particular ways of knowing at that moment. These artefacts provide clues about how social and political systems and structures operate and give shape to forms of contemporary life and thought. These "keywords" circulate and gain authority in different disciplines, institutions, cultures and

spaces, and yet they are "mobile, they can be modified, they are not fixed once and for all" (Foucault, 1997a, pp. 291–292). For example, in the Preamble to the *Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008, p. 4), "the changes and challenges" of the present and the future are defined in terms such as "the twenty-first century", and a "global economy of knowledge and innovation". The *Melbourne Declaration* (MCEETYA, 2008, p. 4) states that "education equips young people with the knowledge, understanding, skills and values to take advantage of opportunity and to face the challenges of this era with confidence". The future, from the vantage point of 2008, was a time–space characterised by "global integration and international mobility", changing job markets as a consequence of globalisation and technological change, of "complex environmental social and economic pressures such as climate change that extend beyond national borders", and of "rapid and continuing advances in information and communication technologies" (MCEETYA, 2008, pp. 4–8).

In the years that followed the production of the *Melbourne Declaration* (2008) the prominent Australian youth advocacy organisation, the Foundation for Young Australians (FYA, 2015a, 2016a & 2016b), released a series of reports which described the future of work in strikingly similar terms, including the three trends of automation, globalisation and collaboration. The FYA (2015a; 2016a; 2016b) also called for transformations to Australia's education systems, the professional development of teachers, and enterprise skills and career education programs in order to produce individuals ready for higher productivity jobs, and for creative, independent employment. Both the *Melbourne Declaration* (2008) and the work of the FYA reproduced discourses of young people, skills and futures, that had been produced and circulated throughout global policy stakeholder networks including the OECD, the United Nations (UN), The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the WEF during the first decade of the twenty-first century. In 2018, for

example, the OECD (2018, p. 5) published the report, *The Future We Want: Future of Education and Skills 2030* which describes how the present and future was, and would continue to be, characterised by increased uncertainty. In a section of that report titled "Competencies to transform our society and shape our future", the OECD (2018, p. 5) declares, "If students are to play an active part in all dimensions of life, they will need to navigate through uncertainty, across a wide variety of contexts: in time (past, present, future), in social space (family, community, region, nation and world) and in digital space".

In the cases of the *Melbourne Declaration*, the FYA's *New Work Order* series and the OECD's *The Future We Want*, the keywords used to describe the character of the presents and futures in/for education, training and work, open up a space for the production of "solutions" aimed at the alignment of young people's skills and capabilities, behaviours and orientations to these uncertain futures. However, as I demonstrate and explore in greater detail throughout this thesis, these are not the only ways of knowing futures, the relations between past presents and futures, time scales and/in relation to space.

Lucas Walsh and Ros Black (2022, p. 107), for example, argue that the character of uncertainty inscribed in dominant discourses of futures can be understood as being "perpetuated in the interests of the powerful to keep wage levels low", to keep "young people busy focusing on the present while forgoing the idea that the future can be actively created". Donna Haraway (2016, p. 3) argues that dominant knowledges of the future tend toward "a comic faith in technofixes, whether secular or religious" in which many believe "technology will somehow come to the rescue of its naughty but very clever children". Lauren Berlant's (2011, p. 3) work is productive for understanding the ways in which dominant knowledges of skills and futures can mobilise a kind of "cruel optimism" where the promises of education; for example, for "upward mobility, job security, political and social equality" have become

"fantasies that are fraying". This "cruel optimism" to strive toward "a fantasy of the good life" is reproduced through individualising discourses such as twenty-first century skills, aspiration and enterprise, which are intimately connected to these dominant narratives of the future (Berlant, 2011 pp. 1–3).

In order to resist these dominant knowledges of futures, Rosi Braidotti (2013, p. 185) suggests that the future might be understood as "nothing more or less than inter-generational solidarity, responsibility for posterity". Braidotti (2013, p. 185) contends that a "yearning for sustainable futures can construct a liveable present. This is not a leap of faith, but an active transposition, a transformation at the in-depth level", "rooted in the ordinary micro-practices of everyday life", "aimed at the affirmation of hope" and making "sustainable transformations" (Braidotti, 2013, p. 192).

The calls for the education of subjects to become enterprising and aspirational in relation to the futures produced in global education policy networks, are historically contingent. Part Three analyses some of the logics, networks, and relations of power/knowledge/subjects which give shape to these ways of knowing and governing futures.

A Genealogical Question and Research Aims

Genealogy is a critical practice focused on unsettling the "taken-for-granted components of our reality and the "official" accounts of how they came to be the way they are" (Dean, 1994, p. 4), through analysis of the relations of power, knowledge production and subjectivity (power/knowledge/subjects) that make these understandings of the present function as powerful truths. As discussed in detail in Chapter One, genealogy can be understood as an anti-methodology. This requires of the researcher a particular ethos, in order to develop a "methodological rhythm" that weaves around the asking of crucial questions about how the present has come to be known in a particular way (Tamboukou, 2003, p. 140). Genealogy

involves the development of a "toolbox" (Foucault, 1974, cited in Vucetic, 2011, p. 1299), a set of "thinking technologies" (Haraway, 2016), which are relevant to the particular problems of the present that are being analysed. In this sense, as Mary Tamboukou (2003, p. 140) claims, "there is no way of truly understanding what genealogy is about, other than by concentrating on a genealogy".

Rather than reproduce a linear historical account of the historical conditions that give shape to the present, genealogy seeks to unsettle dominant truth claims and assumptions made about people, populations, problems and institutions, through analysis of particular historical epochs, episodes and events (Vucetic, 2011). Undertaking genealogy involves both analysis of the relationship between what is made present in discourses, and the discontinuities, silences, absences and subjugated knowledges which give shape to these dominant accounts. In order to do this, genealogy emerges through the reflexive consideration of the conditions which give shape to the subjectivity of the researcher, and the opening of a space for understandings of the constitution and relationships between themselves, others, knowledge and reality (Dean, 1994; Garland, 2014; Vucetic, 2011).

This genealogy examines how young people, and the futures that they face have been made knowable and governed in Australian education and across OECD economies from the late 1980s and into the twenty-first century. My intent, in part, is to amplify some of the discontinuities, silences and subjugated knowledges that have given shape to these problematisations of young people, education and futures in what I call Australia's neo-liberal education apparatus. Discourses of twenty-first century skills provide the entry point to these discussions because they condense and mobilise a whole range of claims about what young people should become in/for the future in global policy networks across OECD

economies, in national Australian education and skills declarations, and at state and local government levels.

Michel Foucault's work, its histories and those thinkers who have followed in these traditions, provide models for ways of carrying out this kind of research. As a philosopher in the history of systems of thought, Foucault was called many things by many different people, and he understood himself differently, at different times. In an interview on 25 October 1982 Foucault (1988a, p. 13) stated:

> I'm very proud that some people think that I'm a danger for the intellectual health of students. When people start thinking of health in intellectual activities, I think there is something wrong. In their opinion I am a dangerous man, since I am a crypto-Marxist, an irrationalist, a nihilist.

Foucault's work changed significantly over the course of his life, and as his concepts and theories developed, he engaged in new debates and developed a range of archaeologies and genealogies.[8] Although this thesis is not "about" Foucault, and is not primarily concerned with making a significant contribution to the scholarship "on" Foucault, I reference different elements of his work as it was at different times in his own development and thinking. It is outside the scope of this thesis to trace an entire history of Foucault's work. Instead, I engage with some of his key texts, and the key concepts and models for thinking genealogically.

[8] Foucault understood both archaeological and genealogical approaches as important to the analysis historical of discourses at different times. Mitchell Dean (1994, pp. 33–35) has argued that the two approaches are complimentary. What distinguishes the two is that genealogy is focused on the analysis and re-emergence of "subjugated knowledges":

> If we were to characterise it in two terms, then 'archaeology' would be the appropriate methodology of this analysis of local discursivities, and 'genealogy' would be the tactics whereby, on the basis of the descriptions of these local discursivities, the subjected knowledges which were thus released would be brought into play. (Foucault 1980, p.85)

With this distinction in mind, it is in this sense that Chapter Two of this thesis functions an archaeology of Australia's neo-liberal education apparatus. Part Two and Part Three comprise a genealogy of this apparatus.

I argue that genealogical research is not concerned with identifying the singular origin or beginning to these discourses. Nor does it aim to reconstruct a more truthful history of them. Instead, genealogy aims to disrupt traditional perspectives and approaches to the history of things such as twenty-first century skills and futures, and in doing so, aims to open up spaces to explore silences, absences and subjugated knowledges.

Foucault outlined that a starting point for doing genealogy can be to focus on a problem and examine how it turned out to be the way we perceive it today (Tamboukou, 2003, p. 18). Dreyfus and Rabinow (1982) describe how in searching for this problem, the genealogist can identify a socially shared discomfort about how things are going.[9] Tamboukou (1999, p. 214), for example, maintains that "a genealogy should start with a major interrogation of what has been accepted as the "truth", any truth concerning the ways individuals understand themselves as subjects of this world". This genealogy interrogates those discourses that claim that young people need to govern themselves as an enterprising, aspirational subjects in order to navigate uncertain futures of work and the planet. With this focus, and introductory account of a genealogical approach and ethos in mind, the following genealogical question has emerged, been modified, and guided the conduct of this research:

> What are the conditions of possibility that enable discourses of twenty-first century skills to function as powerful truths in constructing the problem of educating contemporary populations of young people in relation to uncertain futures?

This broad, genealogical question has produced four aims that have shaped this research. The first aim is focused on identifying the dispersed and diverse elements which give shape to

[9] Many academics, writers and thinkers, working with both genealogical and sociological approaches to the studies of young people, education, language, politics and social theory, have articulated their discomfort about the ways in which contemporary neo-liberal rationalities of government continue to produce and reproduce unjust modes of self-governance in/for the present and the future (Bauman, 2000; Brown, 2015; Burchell et al., 1991; Kelly, 2000; 2013; Zuboff, 2019). This work is discussed in detail in Chapter Two.

dominant ways of knowing and governing young people, education and the future in neo-liberal governmentalities. This aim is addressed, at first in Part One, Chapter Two, and at various other times throughout this document:

> First Aim: To identify and analyse the knowledges that are made present and absent in Australia's neo-liberal education apparatus that identifies twenty-first century skills as promising to provide the solution to the problem of educating contemporary populations of young people in relation to uncertain futures.

The next two aims emerge from the first and are focused more specifically on the subjects and objects of Australia's neo-liberal education apparatus. My second research aim is focused on the kinds of subjects that are made knowable and governed in Australia's neo-liberal education apparatus. This aim is addressed in Part Two:

> Second Aim: To identify and analyse the relations of power/knowledge/subjects that shape those discourses that suggest that young people need to be educated to become enterprising and aspirational in relation to uncertain futures.

My third research aim is focused on the kinds of futures that are made knowable and governed in Australia's neo-liberal education apparatus. This research aim is addressed in Part Three:

> Third Aim: To identify and analyse the relations of power/knowledge/subjects that shape those discourses that suggest that young people need to be educated in relation to the uncertain futures of the Fourth Industrial Revolution and Sustainable Development.

The final research aim is addressed at various points in the discussion sections of each chapter, and in a more focused way in the Coda to this thesis. This aim is concerned with what might be said and done in the spaces that I have opened up through this genealogical research:

> Fourth Aim: To identify and explore different relations of power/knowledge/subjects that can contribute to discourses of educating young people for more socially just and sustainable presents and futures.

This final aim provides an opportunity to consider *What next?*, to reflect on these research aims, and to consider the possibilities that work in fields such as posthumanism, and feminist studies of techno-science create for different ways of knowing young people, education and futures.

Together, these aims function as a way of identifying, then strategically focusing on key elements of what I identify as a Australia's neo-liberal education apparatus. They also provide a means to structure this analysis throughout Parts One, Two and Three of the thesis. These three parts can be understood as framing the approach and an archaeological analysis of the apparatus (Part One), and genealogical analysis of the subjects (Part Two) and the objects (Part Three) of the apparatus that comprises this genealogical work.

Structure of this Thesis

This thesis does not include stand-alone methodology or literature review chapters. The rationale for this is explained in detail throughout Chapter One: Genealogy. Each chapter in the thesis is comprised of an introduction, another section which narrates the data and entry point for the chapter, and a series of discussions organised around the themes that have emerged from a description and analysis of that data.

Part One is titled "A Genealogical Ethos and Australia's Neo-Liberal Education Apparatus". This part includes two chapters. Chapter One: Genealogy describes the vocabulary, key ideas and tools that comprise the genealogical ethos and approach which has given shape to the aims outlined in this Introduction. Engaging with Michel Foucault's work, and his interlocutors, I consider the question "What is Genealogy?". The core sections engage in a discussion about genealogy as a way of becoming and of knowing the self, others, knowledge and realities, and the analytical tools and methods that can enable a researcher to do genealogy. Engaging with these questions, and Foucault's work, produce tensions for

defining and developing a traditional methodology. I explain how genealogy enables me to work with this problem. Broadly, Chapter One provides an outline of the approach, vocabulary, conceptual and analytical tools, and methods, which enable me to describe and analyse the discourses of young people, skills and futures in Part Two: Educating Enterprising and Aspirational Young People and Part Three: Educating Young People for Uncertain Futures. I tell a version of Rosie's story as an Interlude at the end of Chapter One.

Chapter Two: The Emergence of Australia's Neo-Liberal Education Apparatus, is an archaeological account of some of the key discourses, stakeholders, networks and events that enable me to develop the genealogical work in Part Two and Part Three. I discuss the character of a neo-liberal version of capitalism as it frames the social and political time period of the last five decades and which mark the boundaries of the archive that I work with. The four sections that follow this overview of the character of neo-liberal capitalism, structure a narrative about four key education and schooling declarations published in Australia between 1989 and 2019. These sections, about the *Hobart*, *Adelaide*, *Melbourne* and *Alice Springs (Mparntwe)* declarations enable me to narrate some key events in the neo-liberal problematisation of liberal welfare government in Australia, and to describe the way these changes reshaped Australian education policy and curriculum during that period. The discourses, documents, moments and stakeholders captured in this initial mapping of Australia's neo-liberal education apparatus, enable me to introduce the elements which are revisited in greater detail throughout Part Two and Part Three. Ash's story is told in the Interlude at the end of Chapter Two.

Part Two: Educating Enterprising and Aspirational Young People is a genealogical analysis of the ways in which key elements, strategic relations, and problems in this apparatus come to know and govern young people as needing to be and become enterprising and aspirational. In

an Introduction to Part Two, I introduce the tools/concepts of "figure/s" (Haraway, 2016; Threadgold, 2020), "artefacts of expertise" (Kelly, 2000), and "governmental fantasies" (Faye, 1991). "Figures", in particular, provides a means to identify and discuss the limited forms of subjectification made available in/through discourses of twenty-first century skills, enterprise and aspiration, and to signify the simultaneously "material-semiotic" function of discourses of/about the behaviours and dispositions of the individual self (Haraway, 2008). This tool is used throughout Part Two to analyse the conditions, limits and possibilities which give shape to the ways in which young people are understood as needing to govern themselves in Australia's neo-liberal education apparatus.

Chapter Three: Being and Becoming an Enterprising Young Person is a genealogical analysis of the conditions, limits and possibilities of knowing and governing young people as needing to become enterprising. Chapter Three includes a description of the Foundation for Young Australian's (FYA) *New Work Order* report series, and discourses of enterprise skills that had been developed there from 2015 until 2019. I map some key events in the historical emergence of these ways of knowing and governing young people and argue that these discourses provide examples of the role that disciplinary modes of power/knowledge/subjects play in Australia's neo-liberal education apparatus. I argue that this is an apparatus which functions, in part, by disaggregating, disassociating, disembodying, and visualising knowledges about young people through global networks of non-government organisations, businesses, thinktanks and governments. I discuss some of the consequences of these ways of imagining and governing young people in Australia's neo-liberal education apparatus, and the silences and limits to these discourses. I argue that the complexities, structural inequalities, differences and places which shape young people's lives are, largely, made absent in these discourses. I tell a version of Chloe's story as an Interlude at the end of Chapter Three.

Chapter Four: Aspirational Subjects introduces, describes and analyses a cluster of documents which have been significant in shaping global discourses aimed at aligning young people and education with the labour markets and jobs of the future. It examines the OECD's (Mann et al., 2020a; 2020b) *Dream Jobs? Teenagers' Career Aspirations and the Future of Work* report series and discusses how discourses of aspiration frame relations and dimensions of disadvantage in terms of the individual deficits of young people. I argue that aspiration in these contexts can be understood as a moral technology of the self (Foucault, 1988a) which aims to align young people's temporal orientations with the futures defined in this apparatus. I also draw on Appadurai's (2004) work on the "capacity to aspire" and Braidotti's (2019) "affirmative ethics" to discuss the limits of the power/knowledge/subject relations which give shape to dominant discourses of "aspirational" young people. Ruth's story is told in the Interlude at the end of Chapter Four.

Part Three: Educating Young People for Uncertain Futures is a genealogical analysis of the conditions, limits and possibilities of knowing and governing futures in terms of the keywords, the Fourth Industrial Revolution, and Sustainable Development. Part Three examines how economic, technological and environmental futures have become known and governed in relation to education, and the challenges that these futures pose for young people and the development of their skills.

Chapter Five: The Future of Work: Educating Young People in/for the Fourth Industrial Revolution, includes an analysis of the WEF's *Future of Jobs* report series (2016; 2018; 2020a) and related key concepts, and traces some of the policy documents which have contributed to the material and discursive formation of discourses of flexible work and automation in relation to Australian education, young people and skills. This chapter argues that the futures of work produced in Australia's neo-liberal education apparatus, subjugate

knowledges about the distribution and impact of precarious work and unemployment on young people, and the limits of producing futures as a knowable, technical problem that is amenable to technical solutions. Michael's story is told in the Interlude at the end of this chapter.

Chapter Six: The Future of the Planet: Educating Young People in/for Sustainable Development. This chapter builds on the work of Chapter Five, and describes and analyses a series of texts, policies and events which informed the production of the United Nations Sustainable Development Goal 4 (SDG4) *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all* (2015), including: *The Brundtland Report* (1987); *The Rio Declaration* (1992) and *Agenda 21* (1992); *The Millennium Development Goals* (2000), the *Decade of Education for Sustainable Development* (2005–2014) and *The Future We Want* (2012); the *Hangzhou Declaration* (2013), the *Muscat Agreement* (2014), the *Incheon Declaration* (2015a); and the *5-Year Progress Review of SDG4 – Education 2030 in Asia-Pacific* (2021). Through an analysis of this series of reports, agreements, declarations and meeting notes, I describe the emergence of discourses of Sustainable Development, and in particular its intersection with education policies and programs. This chapter describes how dimensions of intergenerational justice, have been made absent from dominant discourses of the future of the planet, and argue that a distinctly anthropocentric approach to Sustainable Development and related education policy has emerged during the past five decades. It also discusses the possibilities that a post-human, affirmative ethics presents in this context, and outline what youth collectivities such as the SS4C and Fridays For Future movements suggest about different ways of knowing presents and futures. I tell a version of Astrid's story as an Interlude at the end of Chapter Six.

Each Chapter in this thesis includes analysis of the conditions which structure the limits and possibilities of Australia's neo-liberal education apparatus. These analysis enables me to argue that, during the later decades of the twentieth and twenty-first century, Australian education systems and structures have been governed through a complex assemblage of diverse and dispersed elements. These elements include global policy makers and organisations, think tanks, and education, training and labour market systems, ACTU members and union figures, ministerial councils, curricula, academics and academic knowledges, international reporting mechanisms, international and federal political figures, ministers, Third Sector youth advocacy organisations, and particular forms of expertise. The system of relations that has been established among these elements is characteristic of the logics of neo-liberal capitalism including the pursuit of increased competition, individualism, profit and unsustainable growth.

I argue that the complex assemblage of dispersed elements the comprise this education apparatus, has enabled the reproduction of discourses such as twenty-first century skills, idealised figures of enterprising and aspirational young people, and narratives of an uncertain and precarious future. These dominant understandings about what young people should be educated to be and become, and what the future holds, are assumptions based on particular relations of power/knowledge/subjects. Each Chapter in this thesis discusses some of the characteristics, limits and possibilities of the relations of the power/knowledge/subjects which structure this complex apparatus. I discuss the limits of disciplinary forms of power which break down and disembody knowledge of young people's behaviours, and the limits of individualising, normalising and linear conceptions of young people's temporal orientations. I also explore the limits of techno-centric and anthropocentric narratives of the future, and the erasure of an intergenerational ethic. I suggest the possibilities that youth collectivities such as the School Strikes for Climate (SS4C) movement offer, for allowing young people to

participate in social change, and to resist dominant discourses of enterprise, aspiration and futures.

Throughout these discussions, and in the Coda to this thesis, I engage with the work of Rosi Braidotti and Donna Haraway. I argue that their concepts of "affirmative politics", "entanglement" and "speculative fabulation" (SF) are productive tools for rethinking the dominant relations of power/knowledge/subjects which structure Australia's neo-liberal education apparatus. In the Coda, I revisit the young people's stories that have been included as critically important Interludes throughout this thesis. I argue that young people's stories, and the provocations that I have made in relation to them, provide a "jumping off point" (Coffey, 2022, p. 72) to consider more socially just and sustainable ways of knowing young people, education and futures.

Part One: A Genealogical Ethos and Australia's Neo-Liberal Education Apparatus

What is Happening Now?

In this Part of the thesis, I describe how genealogy, as an ethos, as an approach, and as providing the elements of a toolbox, have enabled me to analyse the conditions of possibility for the emergence of key elements in Australia's neo-liberal education apparatus over the past five decades. Chapter One outlines the approach and tools which have enabled me to do this research. Chapter Two introduces some of the key elements made present and absent, silenced and subjugated in a neo-liberal education apparatus in Australia, and begins the work of addressing the project's first research aim:

> To identify and analyse the knowledges that are made present and absent in Australia's neo-liberal education apparatus that identifies twenty-first century skills as promising to provide the solution to the problem of educating contemporary populations of young people in relation to uncertain futures.

Genealogical research is concerned with asking "What is happening now? What is this present of ours?", "How have we become what we are" and "what are the possibilities of becoming 'other'?" (Tamboukou, 1999, p. 201). In this research I take up these sorts of questions through detailed examination of the everyday practices, routines, systems and discourses that structure the problem of young people, education, the future, and the concept of twenty-first century skills.

Foucault developed genealogies and archaeologies of, for example, the practices of medical science in the nineteenth century (*The Birth of the Clinic*, Foucault, 2003), systems of confinement of the insane in sixteenth to nineteenth century European societies (*Discipline and Punish: The Birth of the Prison*, Foucault, 1977b), and the emergence of discourses of sexuality during the 17th to mid-twentieth century (*The History of Sexuality*, Foucault, 1990). Foucault engaged in these kinds of critical historical analysis because he "saw in them ways of thinking and behaving that are still with us" (Simon, 1971, p. 192). Foucault's approach aims to reveal "those systems which are still ours today and within which we are trapped"

(Simon, 1971, p. 192). As I will illustrate, genealogy is an approach which does not seek to test a particular hypothesis, nor have a particular outcome in mind. Instead, genealogy is considered a hyper and pessimistic form of activism whereby the researcher acts on a sense of discomfort that they hold about the present and about the way things are going (Foucault, cited in Dreyfus & Rabinow 1982).

This approach, or ethos, enables, I suggest, the researcher to remain reflexive, and open to a range of possibilities and directions when analysing the conditions that enable particular discourses to emerge and function as true. Chapter One develops an account of the approach to thinking and research called genealogy, and the tools that are used throughout this thesis. This includes a discussion about the political ethos of genealogy, and the work of French historian and social theorist Michel Foucault. It introduces the work of those who have followed these trajectories and traditions, particularly in the fields of education and youth studies. I argue that the approach called genealogy, and related conceptual tools, enable me to disrupt dominant discourses of young people's skills and futures, and to problematise the historical production of those discourses in Australia's neo-liberal education apparatus.

Apparatus (*dispositif*) is a key conceptual tool used throughout this research as a way of analysing the complex and dispersed, but strategically related, elements and networks which circulate and reproduce particular relations of power/knowledge/subjects and seek to govern young people, education and futures in particular ways. Chapter Two describes the character of what I am calling a neo-liberal education apparatus in Australia. It examines a series of key events in the emergence of this apparatus since the late 1980s in Australia, and discusses the ways in which education and schooling, training and youth policy reform has been reproduced in ways which shape their aims, needs and purposes through the market-oriented logics of a neo-liberal version of capitalism. This series includes four national declarations

that shaped policy discourses related to young people's education and schooling, skills, capability, competency, employability, and enterprise, the twenty-first century, the changes and challenges of the future, and various economic and social policies, curriculum, pedagogies and practices which relate to them.

Chapter One: Genealogy: An Approach and an Ethos

Introduction

Genealogical research is concerned with identifying the relations between power, knowledge and subjectivity which form the conditions for the reproduction of taken for granted assumptions in, about and from the present moment. In this sense, genealogy is understood as a "history of the present" (Dean, 1994, p. 21). Garland (2014, pp. 370–371) argues that genealogy involves examining the relations of power/knowledge/subjects at a particular historical moment:

> Foucault's analyses focus on the unconscious operation of historically specific epistemological structures that function as the unthought conditions of possibility of specific ways of thinking and of generating statements.

The genealogy I present here is concerned with contemporary problematisations of young people, twenty-first century skills, and uncertain futures in a neo-liberal education apparatus in Australia. However, it is also concerned with the more general limits and possibilities of present ways of educating young people in relation to those futures. Foucault (Burchell at al., 1991, p. 75) argues that the objects of his analyses were not:

> "institutions", "theories", or "ideology" but practices – with the aim of grasping the conditions that make these acceptable at a given moment […] practices being understood here as places where what is said and what is done, rules imposed and reasons given, the planned and the taken-for-granted meet and interconnect.

A genealogical approach produces tensions for defining a traditional methodology, and so this approach is better understood as a kind of attitude or ethos toward the analysis of social problems, and the government of the self and others. I describe genealogy as an approach, and the three axes of power/knowledge/subjects along which genealogical analysis can be developed. Throughout this chapter, I introduce Foucault's ideas about the constitution of problems, problematics and problematisation, the different forms of power which constitute

these problems of government, and the concepts of technologies of the self and governmental apparatus. I also discuss the challenge of selecting and constructing a genealogical archive. In a final discussion section I reiterate what a genealogical approach enables me to do in this research, in particular to contribute to the re-emergence of knowledge and knowledge practices that have been discontinued, been made absent, silent and subjugated in the production of these different relations of power/knowledge/subjects.

What is a Genealogical Approach?

In his essay, "What is Enlightenment?" (a response to Immanuel Kant's work of the same name), Foucault (1984, p. 42) describes the general aims of his approach as a "philosophical interrogation", and "one that simultaneously problematizes man's [sic] relation to the present, man's [sic] historical mode of being, and the constitution of the self as an autonomous subject". Such a project requires that the researcher avoid classification of a methodology or prescriptive set of concepts and tools. Instead, what needs to be done, said and developed through genealogy is revealed through the detailed investigation of various social problems themselves. Foucault preferred to think of his genealogies as providing a "kind of toolbox that people can rummage through to find a tool they can use however they wish in their own area" (Foucault, 1974, cited in Vucetic, 2011, p. 1299). He applied concepts and tools to analyse the historical emergence of discourses on sexuality, punishment, and madness, and further in his lectures and descriptions of his own anti-methodology. It is not my intent to make a significant contribution to the literature on Foucault in this section, but to engage with Foucault's work and the ways he wrote about genealogy and the concepts and tools that can be used for this kind of analysis.

There are many analytical and conceptual tools which have been productive in the framing and conduct of this research, and I use the metaphor of the toolbox throughout the thesis. This

way of thinking with different modes has influenced people such as Donna Haraway (2016), who has used the concept of "thinking technologies", and who reiterates the importance of thinking carefully about the entanglement of ourselves as researchers and the theories, realities, frameworks, concepts and tools that we use to think with. In her book *Staying with the Trouble*, Haraway (2016, p. 35) states:

> It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties. It matters what stories make worlds, what worlds make stories.

In the context of this research I have tried to consider not only how discourses are constituted, but to reflexively think about the tools that are used to consider their constitution. Srdjan Vucetic (2011) argues that the various elements that comprise a genealogical toolbox are brought together through the concept of discourse. Discourse is defined by Vucetic (2011, pp. 1299–1300) as "an anonymous collective consciousness within the human language through which meaning is given to subjects and objects". One aim of genealogy is to develop a critical account of history and the "recovery of discourses and discursive contexts" (2011, pp. 1299–1300).

Discourses themselves do not signify singular words or concepts, but are the wider fields involving discussion, signs and the relations which combine them. Discourses can be understood as "ways of relating, thinking and feeling" that "specialize and distribute forms of consciousness, social relations, and dispositions" (Singh, 2015, p. 5). According to Karen Barad (2007, pp. 146–147), discourse "constrains and enables what can be said", through practices that "produce, rather than merely describe, the subjects and objects of knowledge practices". In a genealogical approach, discourse is understood to condense and mobilise particular relations of power/knowledge/subjects, that is, discourse is productive of particular

ways of knowing the self, others and the world. On this point, in *The Archaeology of Knowledge*, Foucault (1969, p. 60) argues that:

> Discourse is not the majestically unfolding manifestation of a thinking, knowing, speaking subject, but, on the contrary, a totality, in which the dispersion of the subject and his [sic] discontinuity with himself [sic] may be determined.[10]

Truth claims about reality, morality, and what it means, for example, to be right, wrong, skilled or unskilled, enterprising or aspirational, are, within a genealogical paradigm, understood as produced and reproduced through discourse. As such, discourses are understood as historically situated, contingent and productive of the material realities of human individuals and societies, and where and how rules, morals, ethical modes of conduct, and calls to action emerge in and through language and practices. Genealogical work is also particularly concerned with identifying silences, absences, discontinuities and subjugated knowledges in discourses. Foucault (1969, p. 21) argues that the "use of concepts of discontinuity, rupture, threshold, limit, series and transformation present all historical analysis not only with questions of procedure, but with theoretical problems".

These terms and the tools outlined in this chapter provide ways of describing change and discontinuity in the emergence and configuration of knowledge at particular historical moments. I will demonstrate that the identification of "discontinuity, rupture, threshold, limit, series and transformation" (Foucault, 1969, p. 21) in the emergence of Australia's neo-liberal education apparatus has enabled the identification of *some* of the silences and subjugated knowledges that were disqualified during this emergence. Silence, for Foucault, leaves a

[10] I want to acknowledge the masculinist language that appears here and in many of the quotations from Foucault and his texts throughout this thesis. The quotation is a translation of the original French (a particularly gendered language), and there has been significant work which engages with Foucault's work in relation to gender (see for example, Taylor and Vintges' collection (2004) *Feminism and the Final Foucault.*

meaningful trace. In Volume 1 of *The History of Sexuality* (1990, p. 27), Foucault describes the relation between silence and discourse:

> Silence itself – the thing one declines to say, or is forbidden to name, the discretion that is required between different speakers – is less the absolute limit of discourse, the other side from which it is separated by a strict boundary, than an element that functions alongside the things said, with them and in relation to them within over-all strategies. There is not one but many silences, and they are an integral part of the strategies that underlie and permeate discourses.

In *Madness and Civilization*, Foucault (1988b, Preface, p. x) writes about the significance of silence to the emergence of psychiatric discourses of madness:

> In the midst of the serene world of mental illness, modern man [sic] no longer communicates with the madman. The language of psychiatry, which is a monologue by reason about madness, could only have come into existence in such a silence. My intention [in writing *Madness and Civilization*] was not to write the history of that language, but rather to draw up the archaeology of that silence.

One overarching aim of genealogical work is to develop a "critical" and "effective" history of a particular set of discourses which can identify and analyse these silences (Dean, 1994, p. 21). Mitchell Dean has carried out many projects using a Foucauldian framework, and has written extensively on the nature of Foucault's ethos and methods. In *Critical and effective histories: Foucault's methods and historical sociology*, for example, Dean (1994, p. 21) describes Foucault's works as critical and effective histories because they differ from traditional, linear accounts of how we got to where we are now. Dean (1994, p. 21) argues that this kind of investigation makes use of historical resources to "reflect upon the contingency, singularity, interconnections, and potentialities of the diverse trajectories of those elements which compose present social arrangements and experience".[11]

[11] Dean's (2002) work *Critical and effective histories: Foucault's methods and historical sociology* was republished in 2002. Dean's engagement with Foucault's work in *Governmentality: power and rule in modern society* (2010) and *Governing Societies: political perspectives on domestic and international rule* (2007) are also significant for understanding and developing a genealogical approach.

For Dean (1994, p. 4), genealogy is a critical practice in that it is focused on problematising the "taken-for-granted components of our reality and the 'official' accounts of how they came to be the way they are". As well as being critical, genealogy must be effective. Genealogy is effective when, following Fredrich Nietzsche, it "sets itself against what might be called the colonisation of historical knowledge by these synthetic philosophies of history" (Dean, 1994, p. 4). According to Vucetic (2011, p. 1302), Foucault's:

> Historical analyses of clinics, prisons, asylums and hospitals in European history can all be seen as effective because they each clearly demonstrated how and why some subjects and social items were brought about and not others, what became forgotten and with what consequences for the present.[12]

The way that discourses come into being, are described, genealogically, in terms of the concepts of "descent" and "emergence". I briefly outline these two important terms here. Paul Rabinow (1984, p. 83) cites Foucault in his discussion of descent and suggests that "Genealogy as an analysis of descent, is thus situated within the articulation of the body and history. Its task is to expose a body totally imprinted by history and the process of history's destruction of the body". For Tamboukou (1999, p. 209), the analysis of descent "disturbs previous immobile statements, fragments of unified truths, and exposes the heterogeneity of previous consistencies". In contrast, the analysis of "emergence", Tamboukou (1999, p. 209) indicates, "must delineate the deployment of various processes and power relations in various systems of subjection within which things appeared as events on the stage of history". Throughout this genealogy, the term descent is taken to refer to the ways in which discourses are visited on the human body in processes of making subjects. Emergence, is taken to signify the kinds of analysis in genealogy which describe multiplicity, disparity, and complexity as the preconditions for the ways in which things are understood in the present.

[12] The idea of "effectiveness" is revisited in the final section of this chapter in relation to Vucetic's (2011) three E model of genealogy in practice; "episodes", "examples" and "effectiveness".

The concepts of emergence, descent and discourse are key concepts in this genealogical work and I expand this discussion concerned with the approach and tools that enable me to problematise dominant ways of knowing, governing and educating young people in/for uncertain futures.

A Genealogical Ethos

Genealogy involves the researcher taking up a particular *ethos*, an attitude or approach, to ways of understanding the constitution of themselves, of others, and the social problems that are the object of their analysis.[13] This section outlines the ways in which a genealogical ethos involves particular ways of understanding the constitution of human subjects, and at the same time, researchers understanding of themselves. Foucault (1984, p. 32–50) emphasises that the role of a genealogist is to examine the conditions that make possible ways of knowing the self, others and the present moment:

> The critical ontology of ourselves has to be considered not, certainly, as a theory, a doctrine, nor even as a permanent body of knowledge that is accumulating; it has to be conceived as an attitude, an ethos, a philosophical life in which the critique of what we are is at one and the same time the historical analysis of the limits that are imposed on us and an experiment with the possibility of going beyond them.

Foucault's genealogical ethos was shaped by his reading of the work of Fredrick Nietzsche. Mahon (1992) argues that Foucault read Nietzsche as revealing the futility of metaphysics (the field of science interested in knowing fundamental principles of being, knowledge, time, space, etc), and that Foucault can be read as revealing the futility of the self (the claim to truth of some kind of essential, natural, fundamental state of being). Foucault (1977a, p. 371) claims that:

[13] In this sense, this "genealogical" thesis is situated in a space that is not "sociological", but which makes reference to sociologies of youth, education, work, futures, as well fields such as posthumanism, and feminist studies of techno-science.

> The genealogist refuses to extend his [sic] faith in metaphysics, if he [sic] listens to history, he [sic] finds that there is "something altogether different" behind things: not a timeless and essential secret, but the secret that they have no essence, or that their essence was fabricated in piecemeal fashion from alien forms.

Building on this point, in his article "Foucault's Untimely Struggle" in a special issue of *Theory, Culture & Society* on the 25th anniversary of Foucault's death, Paul Rabinow (2009, p. 39) describes this work of confronting one's own biases, and of developing this attitude of anti-essentialism, as a "Hellenistic struggle"; "a mode of lifelong practice and exercise, a form of perpetual vigilance and training". Rabinow (2009, p. 39) argues that "the object of the struggle consisted in part in focusing attention on and unlearning the myriad bad habits and dispositions that one had accumulated and continued to accumulate". This approach to thinking within a paradigm of anti-essentialism, and ongoing self-transformation is the mode of "becoming" that genealogy requires the researcher to consider and to take up.

In a more contemporary space, in his paper "Figures of youth: on the very object of Youth Studies", Steven Threadgold (2020, p. 695) describes how popular discourses conceive youthful subjects as in a state of transition, of "becoming something else, developing towards something better: being an adult". This transitional definition of becoming, Threadgold (2020, p. 695) argues, is problematic because "we know that the process of becoming never ends. There is no endpoint of becoming until death, and even then, one becomes something else". This recognition that humans are always becoming something or someone else, is a key element of the genealogical approach. Foucault (1988a, p. 9) applied these ideas not only to his own analysis of discourse, truth, and social problems, but also to himself and his own life:

> I don't feel that it is necessary to know exactly what I am. The main interest in life and work is to become someone else that you were not in the beginning. If you knew when you began a book what you would say at the end, do you think that you would have the courage to write it? What is true for writing and for love relationships is true also for life. The game is worthwhile insofar as we don't know what will be the end.

This sense of becoming also appears to emerge from his reading of Friedrich Nietzsche. For Nietzsche, becoming involves the recognition of multiple urges and tendencies at different points in human lives (Nica, 2015). Nietzsche's thinking on becoming was important in its historical context and to Foucault's work. Nietzsche proposed questions about the nature of the human individual that were distinct from the assumptions made in Platonic and Christian traditions about the truth of a unified, static human subject. Becoming, in Nietzsche and Foucault's use of the term, is an important disposition for the researcher to consider, when investigating discourses which make truth claims about universal human subjectivities, the soul, reason, or nature (Nica, 2015, p. 28). According to Nica (2015, p. 26), Nietzsche argues that the "subject is multiplicity" and "one who is made out of numerous clusters of conflicting energies, drives and forces". Becoming speaks to the relations between the production of subjectivities and discourses, outlined in the Introduction. These relations are expanded in detail in a later section.

Genealogy has also been understood as a form of critique or a critical attitude. Judith Butler (2001), in her article "What is Critique: An Essay on Foucault's Virtue", refers to Raymond Williams and Theodor Adorno's work, and argues that they took up approaches similar to Foucault's genealogical form of critique. Williams, according to Butler, addresses the need for a vocabulary to describe practices that are not reduced to fault-finding or judgment, but that suspend judgment. Butler claims that for Adorno, judgment or criticism involves thinking within already constituted categories. In performing critique, however, we ask about the constitution of these categories of thinking themselves. What Adorno, Williams, Foucault and Butler share is a commitment to the practice of asking after the constitution of discourses and the relations between discourses, practices, and material realities, or, more specifically, the relations between power/knowledge/subjects. Their work aims to map the field, or systems of thought, through which knowledge and subjectivities are produced at a particular

historical moment. Butler (2001) describes Foucault's critique as a particular attitude to the present, and argues that this attitude involves suspending moral judgement. That is, the genealogist does not ask after what is right or wrong or good or "bad", but to suspend judgement, observe, and deconstruct normative and moral categorisations and assumptions, and to treat everything as "dangerous". As Foucault (In Dreyfus & Rabinow, 1982, pp. 231–232) stated:

> My point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do. So, my position leads not to apathy but to a hyper and pessimistic activism.

Genealogy can also be understood as a kind of anti-methodological approach. Maria Tamboukou (1999, p. 201) contends that genealogical questions "create unexplored and even un-thought areas of investigation", and suggests that such questions can enable the researcher to "problematise" the production and reproduction of particular relations of power/ knowledge/subjects. This involves drawing on a "hyper and pessimistic activism" and exploring the dominant assumptions which constitute a problem space (Foucault in Dreyfus & Rabinow, 1982, pp. 231–232). Mitchell Dean (1994, p. 35) echoes the importance of this project of problematising taken for granted assumptions, and argues that "genealogy is conducted in the presence of certain issues problematised by contemporary social struggles". In twenty-first century skills discourses in education, for example, young people's skills, often their "lack" of them, are imagined as a problem that needs fixing. The genealogist aims to unsettle, or problematise these assumptions, by examining relations of power/knowledge/subjects that enable their production.

If genealogy is to be considered as an approach and an ethos, rather than as a methodology, then this produces tensions for when the researcher considers how to structure their work. As I have indicated, Foucault offered the metaphor of the toolbox to clarify that the genealogist,

in this "spirit" of non-conformity and critical attitude, can identify and develop the frameworks and tools that are most relevant to the genealogical question at hand. In the genealogical space of this project a variety of conceptual tools have been used.

Problematisation

An important tool in this work is problematisation. Foucault was concerned with analysis of the relations of power/knowledge/subjects which give shape to what he called a problematic of government condensed in a particular discourse (Foucault 1984, p. 388). Thomas Lemke (2011, p. 72) argues that Foucault understood his own genealogical work in relation to the project of unsettling the historical constitution of problems:

> Foucault understands his books less as "truth books" (livre-vérité) than as "experience books" (livre-expérience), which, by narrating a concrete historical content, refer to contemporary practices and transform the way we look at them. Thus, "experience books" do not limit themselves to stating a historical truth but take truth as a starting point for an analysis that pursues a specific objective: the problematisation of the way we think about and judge certain objects in order to distance ourselves from their naturalness or self-evidence – and to work toward new experiences.

Foucault (1984, p. 343) states that "you see, what I want to do is not the history of solutions […] I would like to do the genealogy of problems, of *problematiques* [original emphasis]". In this sense, Foucault (1984, p. 49) also proposes:

> What must be grasped is the extent to which what we know of it, the forms of power that are exercised in it, and the experience that we have in it of ourselves constitute nothing but determined historical figures, through a certain form of problematisation that defines objects, rules of action, modes of relation to oneself.

Carol Bacchi (2009) engages with Foucault's concern for the production of problems, and provides a number of examples of how to develop analyses of the conditions that enable various problems to emerge. Bacchi (2009, p. 1) describes how "problem representations" carry implications for "how the issue is thought about, and for how the people involved are

treated, and are evoked to think about themselves". According to Bacchi (2009, p. 44), asking after the ways in which a problem is represented – it:

> presumes that some problem representations benefit the members of some groups at the expense of others. It also takes the side of those who are harmed. The goal is to intervene to challenge problem representations that have these deleterious effects.

In order to disrupt, unsettle or indeed problematise dominant, and historically contingent, problems of government, genealogical work seeks to describe the conditions which shape their limits and possibilities. In his own genealogies and lectures, Foucault provided ways of understanding three distinct and interconnected axes along which to analyse these conditions. These include power/knowledge/subjects, and in particular, their sovereign, disciplinary, and governmental modes and practices. In the following sections, I outline what Foucault had said about these three axes and how these tools have been understood and used in the conduct of this research.

Three Axes: Power/Knowledge/Subjects

Across his four-volume work *The History of Sexuality*, Foucault argues, as he did in other genealogies, that sexuality had emerged as an apparatus comprised of a complex assemblage of discourses, scientific knowledge practices, of Christian values and morals, institutions such as schools and churches, and diverse mechanisms and daily practices.[14] Foucault argues that a governmental apparatus of sexuality could be understood to have emerged during the seventeenth to mid-twentieth century through combinations of scientific expertise, the emergence of particular understandings of sexuality that signal a shift from *ars erotica* to *scientia sexualis*, and certain instruments of government such as confession (Foucault 1990; 2012). Through this work, Foucault describes the forms of power/knowledge at work in

[14] *The History of Sexuality* was first published in French in 1976 (Volume 1), 1984 (Volume 2) and 1984 (Volume 3), with Volume 4 published posthumously in 2018.

seeking to govern subjective experiences of sexuality, and in doing so he sought to challenge the "repressive hypothesis" (Anderson, 2010) that Western societies suppressed sexuality during this time and instead that the combined forces of the elements in this apparatus were productive of discourses of sexuality. Foucault's approach to power in this context has been discussed by Anna Anderson (2010, p. 568) who argues that we need to think beyond the dominant conception of power as something "exercised from top down" and which "must have as its effect, the crushing of agency and freedom, and the suppression of truth". Instead of this repressive conception of power, Foucault sought to describe the ways in which forms of power/knowledge, particular understandings and practices of freedom, truth and the constitution of the subject are historically situated and reproduced over time through discourse.

In this sense, Foucault describes power as dynamic and relational. In *Ethics: Subjectivity and Truth*, Foucault (1997a, pp. 291–292) states that:

> when one speaks of *power*, people immediately think of a political structure, a government, a dominant social class, the master and the slave, and so on. I am not thinking of this at all when I speak of *relations of power* [original emphasis]. I mean that in human relationships, whether they involve verbal communication such as we are engaged in at this moment, or amorous, institutional, or economic relationships, power is always present: I mean a relationship in which one person tries to control the conduct of the other. So I am speaking of relations that exist at different levels, in different forms; these power relations are mobile, they can be modified, they are not fixed once and for all.

Where there is knowledge and power there are always sites of resistance. Resistance, for Foucault (1990, pp. 95–96), is "never in a position of exteriority in relation to power", rather, "where there is power, there is resistance". Foucault (1990, pp. 95–96) was just as interested in institutionalised forms of power and knowledge in the production of discourses, as he was in the "plurality of resistances" that emerge dynamically and simultaneously as part of power relations. He observes that "resistances that are possible, necessary, improbable; others that

are spontaneous, savage, solitary, concerted, rampant, or violent; still others that are quick to compromise, interested, or sacrificial; by definition, they can only exist in the strategic field of power relations" (1990, pp. 95–96).

In this genealogy, I have adopted this understanding of power as relational, mobile, and enacted and made possible through the dynamic and simultaneous production, reproduction and resistance to particular forms of knowledge. Understanding the relationship between power/knowledge forms the basis from which the genealogist can describe the epistemological field of a particular historical moment or episteme. Foucault describes this concept of episteme in his early work, *The Order of Things* (Foucault, 1973). He states that "in any given culture and at any given moment, there is always only one episteme that defines the conditions of possibility of all knowledge, whether expressed in a theory or silently invested in a practice" (1973, p. 168). However, in later work, in *Power/Knowledge*, Foucault (1980, p. 197) acknowledges that there may be multiple epistemes coexisting and interacting at a particular moment:

> I would define the episteme retrospectively as the strategic apparatus which permits of separating out from among all the statements which are possible those that will be acceptable within, I won't say a scientific theory, but a field of scientificity, and which it is possible to say are true or false. The episteme is the "apparatus" which makes possible the separation, not of the true from the false, but of what may from what may not be characterised as scientific.

I discuss the important concept of apparatus in greater detail later. I want to point out in this quotation how Foucault thought about the relations between power and the production of specific, scientific knowledges. Foucault's tools enable a way of understanding the relations of power/knowledge that make it possible to define who can tell the truth, how it is told, maintained, and organised. Truth, Foucault (1980, pp. 113–114) understands, is "a system of ordered procedures for the production, regulation, distribution, circulation and functioning of

statements". Truth-making functions in "a circular relation to systems of power which produce it and sustain it, and to effects of power which it induces and which redirect it" (Foucault, 1980, pp. 113–114). Within a particular knowledge system or episteme which produces discourses which function as true, there are always knowledges that have been made silent, absent, or as Foucault suggested, *subjugated*. Subjugated knowledges are "a whole set of knowledges that have been disqualified as inadequate to their task or insufficiently elaborated: naive knowledges, located low down on the hierarchy, beneath the required level of cognition or scientificity" (Foucault, 1980, pp. 81–2). In relation to this point, Carol Bacchi (2009, p. 44) discusses the role of the researcher in identifying subjugated knowledges. Bacchi argues that the genealogist can enable subjugated knowledges to reappear in discourse, by asking "What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be conceptualised differently?"

This practice of identifying subjugated knowledges can engage discussions about forms of power/knowledge/subjects which differ from dominant modes. Srdjan Vucetic (2011, p. 1300) outlines the important relationship between power relations, forms of knowledge production, and this third axis that is the constitution of subjectivities:

> First, discourses constitute subjects – subjectivities, subject positions, identities – in two continuous ways: they enable/constrain what is 'thinkable' in a given discursive context and they reward/punish ideas, institutions, and practices that are congruent/deviant with the pre-set political boundaries of inclusion/exclusion.

As Vucetic (2011) claims, from a genealogical approach, subjectivity is understood as simultaneously material and discursive, and emerges through, and is intimately connected to, the forms of power/knowledge being produced at a particular moment. Foucault argues that asking about the historical constitution of human subjects through an analysis of

power/knowledge can help to expose one's own status as a subject, and the status of essentialist claims about human subjectivity.

In analysing the relations between these three dimensions of power/knowledge/subjects, the genealogist must acknowledge that seemingly universal conceptions of humanity and freedom are historically situated and contingent. Through his histories of European asylums, sexuality, prisons, medicine and policing, Foucault used this approach to the constitution of subjectivity to describe how discourses, and their institutions and practices, are productive of material conditions in which populations and subjectivities are shaped. It is important to note here, that just because particular systems, structures and relations of power/knowledge may seek to produce particular subjects, this does not mean that individuals occupy these positions. However, genealogical analysis of these relations and structures, can make visible how particular discourses define the limits and possibilities for forms of selfhood and action. In their book *Gender: In World Perspective* Raewyn Connell and Rebecca Pearse (2014, p. 70) provide an example of this tension in their discussions about how gender arrangements in a particular society are related to social structures:

> a structure of relations does not mechanically decide how people or groups act. That is the error of social determinism, and it is no more defensible than biological determinism. But a structure of relations certainly defines possibilities for action, and their consequences.

In this context, Connell and Pearse (2014, p. 70) describe how "in a strongly patriarchal gender order, women may be denied education and personal freedoms, while men may be cut off from emotional connections with children":

> In this sense, social structure conditions practice. Yet structure does not exist in a way that is somehow prior to everyday life. Social structures are brought into being by human activity, over time; they are historically created. Gender relations come into being as we continue to engage in 'gendered modes of behaviour', as Carol Hagemann-White (1987) puts it. Structure and change are not opposed; they are part of the same dynamic of our social life.

In this sense, genealogy seeks to identify and intervene into dominant relations of power/knowledge/subjects, and to approach them as axes which are bound together in intimate and complex cycles of reproduction and change. Just as enactments of gender are relational, so too are enactments of what it means to be young, skilled, enterprising, or aspirational. In order to analyse these relations of power/knowledge/subjects, Foucault and many other philosophers, genealogists and sociologists have discussed forms of sovereign, disciplinary and governmental power (governmentality).[15]

Sovereign Power

The three distinct forms of power relations discussed in this genealogy comprise sovereignty, discipline and government. All three forms intersect and coexist in contemporary societies and their institutions, and it is through analysis of these three forms (most notably discipline and governmentality) which give shape to the discussions produced throughout this thesis. A brief summary below outlines the nature of sovereign power. Its role is significant as the precondition to the operation of other forms of power. Foucault (In Burchell et al., 1991, p. 102) maintains that these three forms of power remain in play in the government of contemporary life:

> we need to see things not in terms of the replacement of a society of sovereignty by a disciplinary society and the subsequent replacement of a disciplinary society by a society of government; in reality one has a triangle, sovereignty-discipline-government, which has as its primary target the population and as its essential mechanism the apparatuses of security.

[15] Along with Foucault's original texts, in the following sections, I engage with the work of Taylor (2014) and Oksala (2016) to explore the character of sovereign and disciplinary power. I draw on Burchell at al. (1991), Dreyfus and Rabinow (1982), Raby (2012), Rose (1989), Ball (2012) and Brown (2015) to outline an understanding and use of concepts such as governmentality, expertise and technologies of the self.

In this triangle, sovereign power is understood as the obedience of the individual to the laws set by the monarch, state or governing body. Taylor (2014, p. 42) expands on Foucault's definition of sovereign power by suggesting that:

> Sovereign power is a power which deduces. It is the right to take away not only life but wealth, services, labour and products. Its only power over life is to seize that life, to end, impoverish or enslave it; what it does not seize it leaves alone. Sovereign power's right over life is merely the right of subtraction, not of regulation or control.

In their book *Working in Jamie's Kitchen*, Kelly and Harrison (2009, pp. 131–132) sketch the significance of sovereign power as a precondition to the exercise of disciplinary power and governmentality in relation to unemployed young people's training in the hierarchical spaces of the commercial kitchen. Kelly and Harrison (2009, pp. 131–132) state:

> In Foucault's framework, sovereignty is a form of power seeking to establish and maintain relationships of legitimate authority so that this authority itself is maintained. Stenson (1996, p. 12) sets out to situate various youth work practices in a 'complex of inter-related strategies of government: sovereignty, discipline and government'. In doing so he argues that 'the struggle to establish and maintain a legitimated sovereignty is functionally central to Liberal rule' (1999, p. 68). In Stenson's (1996, p. 5) discussion, this struggle is a 'struggle to control geographical territory in the face of internal and external threats, through a monopolisation both of the threat and use of force and attempts to establish the legitimacy of that force'.

Here, Kelly and Harrison suggest that sovereign power is exercised not only by a sovereign state but also in/through contemporary institutions and organisations. In this sense, some of the institutions and organisations discussed in this thesis, such as the Australian federal, state and territory governments, for example, have the authority to exercise sovereign power over certain subjects as the precondition that discipline and government can take place. In contemporary Australian society, and in the context of this research, sovereign power is exercised in relation to young people and their families through the contemporary school system. In every state and territory, for example, legislation makes school attendance compulsory from age 6 to 15, 16 or 17. The following statement comes from the *Education*

and Training Reform Act 2006 (Vic) (Department of Education and Training, Authorised Version No. 096, No. 24 of 2006, pp. 38–39), produced by the Victorian state government, Department of Education and Training (DET):

> All children of compulsory school age (6–17 years) must be enrolled in school or registered for home schooling. If you have been issued with a School Enrolment Notice this means that the School Attendance Officer has become aware that there is no record that your child or children are enrolled in school or registered for home schooling. After other strategies to improve attendance have been implemented and failed under the new legislation, the school have the right to issue an Infringement Notice.

In this context, the individual or family who disobeys the sovereign law/regulation/rule to meet the requirement of school attendance may be required to pay a fine. Sovereign forms of power operate differently across different institutions and continue to play a key role in the constitution of contemporary forms of self-governance in neo-liberal democracies, and in Australia's neo-liberal education apparatus, explored in this thesis. Throughout this thesis these understandings of sovereignty will remain in the background, as my analysis focuses largely on forms and practices of discipline and government. However, throughout this analysis of the "subtle instantiations of disciplinary power", and government, "that promise greater freedom without stipulating their own price" (Taylor, 2014, p. 168), I acknowledge the pervasive authority of sovereign forms of power and the forms of government of the sovereign individual subject.

Micro-Technologies of Disciplinary Power/Knowledge

While Foucault developed much of his thinking about disciplinary power through an analysis of the rationalities that emerged in modern prison systems, and in other institutions (including early, modern schools), the "micro-technologies" that he described, remain as key elements of contemporary institutions such as schools, hospitals, and even the non-government and third sector organisations, businesses and think tanks discussed in this genealogy.

In his seminar *Technologies of the self*, Foucault (1988a, p. 18) argues that disciplinary power can be understood by observing the routines, procedures and exercises that individuals are required to carry out, in order to make their bodies productive. For Foucault (1977b, pp. 25–26), through discipline, the human body "is directly involved in a political field; power relations have an immediate hold upon it; they invest it, mark it, train it, torture it, force it to carry out tasks, to perform ceremonies, to emit signs". As such, in capitalist societies and economies, "the body becomes a useful force only if it is both a productive body and a subjective body".

Foucault identified disciplinary forms of power, as emerging throughout the eighteenth century, when a criminal could still be subjected to sovereign law, however it would "no longer be a mere matter of his crime" (Taylor, 2014, p. 44). Taylor (2014, p. 44) says that the emergence of disciplinary power meant that "power will now be at least as interested in the thief's or murderer's character. It will want to know the conditions, both material and psychological, under which the individual committed his crime". It is for this reason that disciplinary power is concerned with drawing tables, prescribing movements, imposing exercises and tactics (Foucault 1977b, p. 167). The prison system, Foucault (1977b) understands, provides an example of the ways in which institutions condense a host of disciplinary practices within its walls, including forms of individualisation, surveillance, examination, training and normalisation. Joanna Oksala (2016, p. 477) explores the ways in which disciplinary power functions, in part, through breaking down knowledge of human behaviour into elements in order that they can become manageable. Oksala (2016, p. 477) argues that in disciplinary relations of power/knowledge/subjects, "habits and patterns of behavior are broken down and constructed in new ways that are more productive for the aims of modern industrial societies" and that knowledge is reproduced and visited on the body through various techniques so that the body can become "both docile and useful".

Foucault (1977b) describes how, through these practices, disciplinary relations of power/knowledge/subjects attempt to produce a certain docility in target subjects and populations. He (1977b, p. 138) argues that "discipline produces subjected and practised bodies, docile bodies. Discipline increases the forces of the body (in economic terms of utility) and diminishes the same forces (in political terms of obedience)".

Throughout this research, I have paid close attention to the micro-technologies of disciplinary power which seek to break down, disassociate and disembody knowledge in order that the body can be made productive. This aim of producing docility-utility among populations can be observed in the production and reproduction of discourses, programs and practices which seek to develop young people's twenty-first century skills. In *Discipline and Punish: The Birth of the Prison*, Foucault (1977b, p.170) argues:

> Instead of bending all its subjects into a single uniform mass, it separates, analyses, differentiates, carries its procedures of decomposition to the point of necessary and sufficient single units. It trains the moving, confused, useless multitudes of bodies and forces into a multiplicity of individual elements – small, separate cells, organic autonomies, genetic identities and continuities, combinatory segments. Discipline 'makes' individuals; it is the specific technique of a power that regards individuals both as objects and as instruments of its exercise.

The analysis of attempts to produce subjects through disciplinary forms of power/knowledge are carried out through an analysis of "humble modalities, minor procedures" (Foucault, 1977b, p. 170). In relation to education systems, David Kirk and Barbara Spiller (1994, p. 89) argue that Foucault's concept of disciplinary forms of power provides a means of "locating educational practices as one set of micro-technologies which, together with other sets of "little practices" within domains like the military, medicine and so on, make up the infrastructures of disciplinary society".

Throughout *Discipline and Punish*, Foucault (1977b) provides numerous examples of these micro-technologies, shared across various domains, including medical, educational and

military institutions. For example, Foucault (1977b, p. 217) understood "surveillance", as opposed to the "spectacle" of torture and execution in sovereign societies, as an important element in the discipline of subjects:

> Our society is one not of spectacle, but of surveillance; under the surface of images, one invests bodies in depth; behind the great abstraction of exchange, there continues the meticulous, concrete training of useful forces the circuits of communication are the supports of an accumulation and a centralisation of knowledge; the play of signs defines the anchorages of power; it is not that the beautiful totality of the individual is amputated, repressed, altered by our social order, it is rather that the individual is carefully fabricated in it, according to a whole technique of forces and bodies.

This meticulous fabrication of the procedures and practices for shaping human behaviour, such as through the disciplinary micro-technology of surveillance are carried out with the aim to fulfill three criteria: to exercise power at the lowest economic (in terms of expenditure) and political cost (in terms of visibility, resistance); to maximise the intensity and reach of the effects of power without disruption; and "to link this 'economic' growth of power with the output of the apparatuses" (Foucault, 1977b, p. 218). This third and final criteria relates to increasing the docility and utility of all the elements in a system, including human subjects, so that they align with the aims and needs of other apparatuses within that system. In capitalist societies in particular, discipline aims to fulfill the need to enforce "respect for the regulations and authorities" for "preventing thefts or losses" and "to increase aptitudes, speeds, output and therefore profits" (Foucault, 1977b, p. 224). Foucault (1977b, p. 144) called this a "political anatomy" in which the "coercions that act upon the body, a calculated manipulation of its elements, its gestures, its behaviour", enter the human body into "a machinery of power that explores it, breaks it down and rearranges it" in ways which can make it more productive in relation to the needs of the economy. It is in this way, I maintain, that a contemporary education apparatus, that is neo-liberal in character, is assembled in a

way which aims to direct its purposes and promises to align with the needs of neo-liberal capitalist economies.

In order to do this, disciplinary power/knowledge fixes things in the sense that it "arrests or regulates movements", "clears up confusion", but, importantly, it "dissipates compact groupings of individuals wandering about the country in unpredictable ways; it establishes calculated distributions" (Foucault, 1977b, p. 219). Discipline aims to regulate and manage humans in order to "neutralize the effects of counter-power" such as "agitations, revolts, spontaneous organizations, coalitions- anything that may establish horizontal conjunctions" (Foucault, 1977b, p. 219). Discipline defines, analyses, breaks down, and atomises the human individual into sets of behaviours, skills, character qualities "in order to extract from bodies the maximum time and force" through practices of surveillance (Foucault, 1977b, p. 220). Practices such as timetables, training and exercises work together to enable this surveillance and regulation of subjects. The production of such detailed knowledge of what an individual should do and how they should behave, makes it possible to decrease inconveniences to power such as spontaneous organisations and coalitions. Foucault (1977b, p. 221) argues that discipline, through the definition and measurement of disaggregated, disassociated and disembodied knowledges of human behaviour, is concerned with the reduction of the "political" force of the body and aims to re-regulate and to maximise its force as economic utility.

The disaggregation of knowledge into smaller parts, such as sets of skills, dispositions and character traits, is a key element of the disciplinary relations mobilised in Australia's neo-liberal education apparatus. Foucault (1977b, p. 140) contends that:

> The meticulousness of the regulations, the fussiness of the inspections, the supervision of the smallest fragment of life and of the body will soon provide, in the context of the school, the barracks, the hospital or the workshop, a laicised content,

> an economic or technical rationality for this mystical calculus of the infinitesimal and the infinite.

The disaggregation or breaking down of knowledge of the behaviours and dispositions of young people into seemingly "infinitesimal" (Foucault, 1977b, p. 140) elements enables disciplinary knowledges to maintain authority in compulsory education systems. And through this "meticulous observation" of human behaviour the "control and use" of the individual for particular aims and needs is made possible (Foucault 1977b, p. 141).

Foucault (1977b, p. 152) was also particularly interested in the connections between disciplinary power/knowledge and the control of activity through time. What Foucault describes as "anatomo-chronological schema of behaviour" in prisons, military, and schools was concerned with how time is broken down and managed in order to make it possible to govern relations between "gesture" and the "position of the body". "The principle of an ever-growing use of time", according to Foucault (1977b, p. 154) was a key part of discipline, as speed is taught as a virtue. Foucault (1977b, p. 152) proposes that disciplinary power is concerned with enhancing "efficiency and speed" where "nothing must remain idle or useless". Exercise, training, surveillance and visualisation are key mechanisms of discipline (1977b, p. 170). Foucault (1975, pp. 173–189) argues that the subtle partitioning of individual behaviour through disciplinary knowledge enables "a microscope of conduct" in which individuals are made subjects of "infinite examination and of compulsory objectification".

Disciplinary power, the micro-technologies of partitioning, rank, classification and visualisation, and disaggregated, disassociated and disembodied knowledges, have been significant ways of arranging individual human behaviour, and for the extraction of time and labour from human bodies in societies and their institutions. As detailed in Chapters Three and Four, through analysis of the subjects of twenty-first century skills discourses, and

enterprising and aspirational subjects of education, there are limits and possibilities to these relations of power/knowledge/subjects.

Governmentality, Expertise and Technologies of the Self

If discipline breaks down, defines, draws tables, prescribes movements and imposes exercises on human individuals in order to make them productive, then governmentality is a way of understanding how individuals freely conduct themselves in relation to a rationality of government. Technologies of the self, which is a significant concept in Foucault's later work, is an important tool for understanding how particular forms of power/knowledge/subjects work to align the moral disposition of the subject to themselves and others, with the aims and needs of these rationalities. This mode of power/knowledge enables forms and practices of government to appear to operate at a greater distance from the subjects that they seek to govern. These analytical tools of governmentality and technologies of the self are particularly important to the genealogical work that I develop in Chapter Four.

Governmental rationality, or the neologism, "governmentality", is a tool developed by Foucault, and deployed by others, which provides a way of describing the management and regulation of populations in relation to particular rationalities. Governmentality studies provides a way to consider how particular forms of self-conduct function so that individuals align their behaviours and dispositions with the aims and needs of neo-liberal capitalist societies. In this sense, the government of the self, in relation to the needs of labour markets and economies, works in close relation with the dividing practices of disciplinary power/knowledge. For Foucault, the term governmentality is used to describe ways of knowing what the activities of government consisted of, and how they might be carried out (Burchell et al., 1991, p. 3). This tool is aimed at understanding who can govern, what governing is, and what or who is governed. Foucault applies this kind of analysis in his own

genealogies, exploring discourses in Greek philosophy, early Christianity and the beginnings of Liberalism in the 18th century to describe how the development of various forms of governmental power in Western societies have tended toward the "totalising" and "individualising" of subjects through what he calls the "conduct of conduct" (Burchell et al., 1991, p. 3).

The concept provides a tool for examining how people are incited to conduct themselves in particular ways, and to govern their relations with others in their daily life. In addition, it also explains how individuals can be governed through modes of self-formation. This form of power is different from, and yet connected to forms of sovereign power and disciplinary power reproduced through dividing practices and programs. Foucault states that these different forms of power relations are "superimposed, they cross, impose their own limits, sometimes cancel one another out, sometimes reinforce one another" (Dreyfus & Rabinow, 1982, p. 224). In addition to analysis of the daily practices and mechanisms which aim to define, measure, train and assess individuals, I also seek to analyse how individuals are urged to govern themselves as autonomous subjects and in alignment with the needs of dominant rationalities. To study governmentality or governmental forms of power is to examine how individuals become willing subjects of discourses.

These ideas have been taken up effectively in a number of spaces, in genealogies, and in education and youth studies, in particular, in analysis of how self-governance works in neo-liberal capitalist economies.[16] Rebecca Raby (2012, p. 77–89), for example, has used the idea

[16] Michael Peters and his colleagues (2009) published an important collection, titled *Governmentality Studies in Education*, which explores and applies Foucault's concept in relation to studies of education. In relation to the field of youth studies, Peter Kelly (2013) has explored the ways in which discourses of enterprise seek to shape young people's understandings of themselves and choice biographies, in alignment with the needs of market-oriented, neo-liberal governmentalities. Also see, Kelly (2011) in relation to the governmentalisation (the institutionalisation, rationalisation and abstraction) of the forms of knowledge that construct the field of youth studies. Studies of youth, education systems and policies in the global south have also turned to Foucault's work and the field of governmentality studies. Javed Anwar (2022) for example, explores the emergence of what he

of governmentality to describe how young people's participation in "democracy education" has become institutionalised and can be understood as strategy to move individual conduct toward a "neo-liberal, individualised self-governance". Michael Apple (2011) has similarly explored how experts increasingly seek to redefine discourses of democracy in line with consumption practices. Kelly (2000, p. 301) suggests that the "truths of youth" are constructed as "artefacts of expertise" and through "countless and competing governmental programmes", and that these artefacts and programs provoke "dangerous" possibilities in contexts structured by "uncertainty, fear and anxiety". For Raby, Apple and Kelly, analyses of governmentalised knowledges of young people can draw attention to the role of expertise and scientific knowledges in the reproduction of truth claims about who/what individual subjects should be and become. In his chapter "The Gaze of the Psychologist" in *Governing the Soul*, Nikolas Rose (1989, p. 132), for example, draws on Foucault to articulate the way in which fields of expertise:

> stake a claim in the disciplining of the uniqueness and idiosyncrasies of childhood, individualising children by categorising them, calibrating their aptitudes, inscribing their peculiarities in an ordered form, managing their variability conceptually, and governing it practically.

Stephen Ball (2012, p. 15), in *Foucault, Power, and Education*, also describes the role of the expert in the production of discourses and subjectivities:

> Knowledges are produced within power relations also in the sense that some groups or institutions have been able to speak knowledgeably about "others", subaltern groups, who were concomitantly rendered silent – men speak about women,

has called, a "postcolonial Islamic governmentality" in his PhD thesis titled *Educational Leadership and the United Nations Sustainable Development Goals in Post-Colonial Pakistan.* Anwar et al. (2022) have published elements of this work in an article titled "Girls' education in Balochistan, Pakistan: exploring a postcolonial Islamic governmentality" for the *British Journal of Sociology of Education*.

> deracialised whites about racialised others, heterosexuals about homosexuals, the West about the Orient.

The roles of expertise in the production of knowledges are important considerations in this analysis of relations between governmentality and the self-conduct of individuals. Foucault's (Foucault et al., 2008) own work emerged as an analysis of neo-liberal governmentality in the lecture series *The Birth of Biopolitics: Lectures at the Collège de France* during 1978–1979, a genealogy and problematisation of traditional accounts of the modern state. Oksala (2016, p. 481) draws on this lecture series, and argues that for Foucault, neo-liberalism is:

> a rationality of governance that produces new kinds of political subjects and a new organisation of the social realm. It is not reducible to a set of economic policies, such as limiting the regulation of capital, maximising corporate profits, and dismantling the welfare state. As a form of governmentality neoliberalism extends beyond economic policy, or even the economic domain as traditionally conceived. A fundamental feature of neoliberal governmentality is not just the eradication of market regulation, for example, but the eradication of the border between the social and the economic.

This way of understanding the government of the self and others through economic, market-based rationalities and the eradication of the border between social and economic domains indicates the pervasive and totalising logics of contemporary arts of government in neo-liberal democracies. This mobilisation of neo-liberal market rationalities across all domains of life, institutions, and social practice is also a key characteristic of dominant ways of knowing and governing young people, education and futures discussed throughout this thesis. Foucault's concept of technologies of the self provides a way of explaining the relationship between the aims and demands of this neo-liberal governmentality and how and why the individual is governed as needing to constitute the self in particular ways. In his seminar *Technologies of the self* (1988a, p. 18), Foucault differentiates between four main types of technologies, one of which is the technologies of the self:

> which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality.

Foucault's own genealogies are full of diagrams, categories and frameworks for understanding the operations of technologies of the self, and how they have been reproduced throughout different discourses and institutions. Various critical theorists, philosophers and sociologists have used Foucault's concept of technologies of the self, in particular, the technologies of individualisation and responsibilisation, to analyse the limits of these modes of ethical self-conduct in neo-liberal governmentalities. For example, Burchell (1996, p. 29) argues that in neo-liberal governmentalities human individuals are "encouraged freely and rationally, to conduct themselves", while they "must assume active responsibility for these activities, both for carrying them out, and of course, for their outcomes". In this sense, governing through technologies of individualisation and responsibilisation has certain limits and consequences, particularly when they are used to create robust connections between young people and uncertain futures. In addressing some of these limits, Wendy Brown (2015, p. 132) contends that responsibilisation is a distinct technology of government that produces a "moral burdening of the entity at the end of the pipeline. Responsibilisation tasks the worker, student, consumer, or indigent person with discerning and undertaking the correct strategies of self-investment and entrepreneurship for thriving and surviving". Brown (2015, p. 133) also argues that "Responsibilisation signals a *regime* [original emphasis] in which the singular human capacity for responsibility is deployed to constitute and govern subjects and through which their conduct is organised and measured, remaking and reorienting them for a neoliberal order".

Technologies of the self, particularly processes of individualisation and responsibilisation, are important to this research as tools for understandings how young people, education and

futures have emerged as problems of government, and I discuss them in detail in Part Two. In order to perform this analysis, I have gathered an archive, and have mapped the diverse and dispersed elements implicated in this problematic. For Foucault, the concept of apparatus (in French, *dispositif*) acts as a signifier and an analytical tool for gathering and examining the complex cluster of elements and power relations, knowledge practices and discourses, actors and institutions, material and discursive elements, which are combined to serve the strategic aims and needs of neo-liberal governmentalities.

What is a Genealogical Method?

Governmental Apparatus

Foucault's concept of apparatus is a productive tool for taking account of how a diverse and dispersed ensemble of elements combine and reproduce power/knowledge/subject relations and give shape to particular problems and discourses. An apparatus functions as a tool to gather, assemble, and signify how a range of often competing relations and elements function together in the constitution of a complex problem space. The overarching purpose of any apparatus, according to Hardy (2015, p. 200) is "to manage and to successfully incorporate, subsume, or at least nullify disparate and problematic events, elements and forces". Hardy (2015, p. 201) argues that an apparatus:

> creates the circumstances of what can be seen i.e. what is 'identifiable' to the observer; what are the things that can be said, as well as who is able to say them; the (re)organisation and (re)linkage of 'relations of force'; the creation of types of subjectivity that correspond to relations within the dispositif; and […] lines of inconsistency, contradiction, and fragmentation that create circumstances for change.

Education, schooling and skills apparatuses have been described by Foucault and his interlocutors throughout his/their work.[17] In this research I argue that since the 1980s, in

[17] While Foucault never devoted a specific study to the field of education as he did for knowledge, madness, crime, or sexuality, he develops some discussion of the significance of disciplinary knowledge practices to education in Part Three of *Discipline and Punish* (Foucault, 1977b).

Australia, an education apparatus has been emerging that has sought to govern young people's behaviours and dispositions, the future of work and the planet, in ways which align them with the aims and needs of neo-liberal governmentalities. In this way, apparatuses are also always mobile and unstable. Hardy (2015, p. 192) argues that apparatuses are important because they enable us to examine how "dominant groups are able to continually restructure conflicting meanings, discourses, or forces and to 'capture' chance events". In an interview from the collection *Power/Knowledge: Selected Interviews and Other Writings 1972–1977*, Foucault (1980, p. 195) responded to the question "You talk about an 'apparatus of sexuality'. What is the meaning or the methodological function for you of this term, apparatus (dispositif)?". In response, Foucault outlined a three-part definition of apparatus. In relation to the first element, he responded with:

> What I'm trying to pick out with this term is, firstly, a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid. Such are the elements of the apparatus. The apparatus itself is the system of relations that can be established between these elements (1980, p. 195).

What Foucault observes here is that an apparatus is something comprised of "heterogenous" elements, which may at times appear unlikely or unrelated, and include both material things and discourses, including institutions. It is worth clarifying what Foucault meant by institution, before moving on to the second element of apparatus. In the same interview, Le Gaufey asked Foucault, "what is there in an apparatus, over and above the discursive utterances, except the 'institutions'?". Foucault articulates his understanding of "institution" (1980, pp. 197–198):

> The term 'institution' is generally applied to every kind of more-or-less constrained, learned behaviour. Everything which functions in a society as a system of constraint

> and which isn't an utterance, in short, all the field of the non-discursive social, is an institution.

Foucault's response to this question is important, because it emphasises that as a conceptual tool, apparatus aims to capture not only the relations of power/knowledge/subjects that are mobilised in relation to certain problems of government, but also how these discourses materialise through and across social institutions such as the school, prison, church and the family. Apparatus is useful to capture how a cluster of power/knowledge/subject relations operate across dispersed elements, including institutions. Foucault (1980, p. 195) defines the second element of apparatus as:

> the nature of the connection that can exist between these heterogeneous elements. Thus, a particular discourse can figure at one time as the programme of an institution, and at another it can function as a means of justifying or masking a practice which itself remains silent, or as a secondary re-interpretation of this practice, opening out for it a new field of rationality.

This element of Foucault's definition is concerned with the mobile, shifting function of discourses. The identification of an apparatus enables the genealogist to focus on the ways in which discourses travel across different contexts and situations, institutions and subjects, and can change in each environment. This change is constrained by the larger ensemble of heterogenous elements that it continues to be a part of. In this sense, apparatus provides a way of thinking about how power/knowledge/subject relations and elements, structure the conditions of possibility for discourses to take shape and circulate.

Foucault (1980, p. 195) defines the third element of apparatus as "a sort of – shall we say formation which has as its major function at a given historical moment that of responding to an urgent need". For Foucault, an apparatus has a dominant strategic function. He (1980, p. 198) indicates that "the strategic nature of apparatus" is the "certain manipulation of relations of forces, either so as to develop them in a particular direction, or to block them, to stabilize

them, and to utilize them". For Foucault (1980, p. 198) "the apparatus is precisely this: a set of strategies of the relations of forces supporting, and supported by, certain types of knowledge".

An apparatus is produced by and productive of relations of power/knowledge/subjects, which are defined by particular limits and possibilities. In acknowledging these limits and possibilities, the researcher can play with the possibility of different relations of power/ knowledge/subjects. In his essay, "What is an Apparatus", Giorgio Agamben (2009) expands on Foucault's concept and emphasises that humans are often unaware of the apparatuses that incite them to act in certain ways, to develop particular behaviours and dispositions. This is particularly so because the power/knowledge/subject relations, and the institutions and discourses which comprise an apparatus, are so dispersed. Agamben argues that the genealogist has an apparatus when they have identified a diverse set of elements and their networks and describes the power/knowledge/subject relations and strategic function which order and shape the relations between these elements. Agamben (2009, p. 14) states that the apparatus is "the network that is established between these elements" and this network performs a "concrete strategic function", such as imagining young people, twenty-first century skills and uncertain futures as problems of government in a neo-liberal version of capitalism.

In Foucault's view, the analyst has an apparatus when they have succeeded in isolating a cluster of power/knowledge/subject relations sustaining and being sustained by certain types of knowledge (Foucault, 1980, p. 196). In this research, identifying an apparatus has involved selecting an archive that represents the complex governing work that promises to make up the skilled, enterprising, aspirational future-oriented young person, and / in relation to the production of uncertain futures of work and the planet (Rose & Miller, 1992). This does not

mean that my research encompasses every document, report, actor, meeting record or event that has contributed to the emergence of these discourses – and this does not mean that this is an account of a fixed, stable education apparatus. This research is one account of an emerging education apparatus. In this sense, apparatus is a useful conceptual tool to identify and describe the relations between, and strategic aims of, the ensemble of diverse elements which enable young people, education and futures to be governed as problems that need responding to, managing, and regulating in neo-liberal capitalist economies.

Episodes, Examples, Effectiveness

This section describes the approach taken to gathering an archive to work with, and the language used to describe it. This can be particularly challenging given that both Foucault and Agamben have written about the possibility for an apparatus to encompass almost any discursive or non-discursive thing. Gathering an archive is also problematic in terms of the politics associated with deciding what elements are to be included and omitted, what is made present and absent in the research. John Law, Adele Clarke and Srjdan Vucetic's work provide different, though related, ways of thinking about how to deal with these challenges. In an interlude from his book *After Method*, Law (2004, p. 85) describes the concept of "method assemblage" as a "bundle of ramifying relations" aimed at:

> the crafting and enacting of boundaries between presence, manifest absence and Otherness. These boundaries are necessary. Each category depends on the others, so it is not that they can be avoided. To put it differently, there will always be Othering. What is brought to presence – or manifest absence – is always limited, always potentially contestable. How it might be crafted is endlessly uncertain, endlessly revisable.

"Method assemblage" signals a reflexive approach which recognises the implications of gathering an archive, describing discourses, focusing attention on particular elements, and telling particular stories. Law's concept of method assemblage speaks to Foucault's concept of the genealogical toolbox, in that the genealogist can select the concepts, documents and

vocabularies for analysis that are, arguably, most relevant to the genealogy and the apparatus. However, Law's work also serves as a reminder that researchers are always implicated in the reproduction of what is to be understood as "in here" and "out there", what is made "present", "manifestly absent" and "absent as Other" in relation to the problem in question. Law (2004, p. 42) describes the key elements of method assemblage as:

> the crafting of a hinterland of ramifying relations that distinguishes between: (a) 'in-here' statements, data or depictions (which appear, for instance, in science and social science publications, and include descriptions of method); (b) the 'out-there' realities reflected in those in-here statements (natural phenomena, processes, methods, etc.); and (c) an endless ramification of processes and contexts 'out-there' that are both necessary to what is 'in-here' and invisible to it.

According to Law, particular discourses, voices, organisations, actors and knowledges are always made present and absent in the historical emergence of problems. Presence, for example, is only made possible if some voice or knowledge is made absent, silent, subjugated and this has been considered both in gathering an archive, and in developing the narrative and focus of this thesis. Adele Clarke (2005; 2015) provides a technique that assists in the collection and arrangement of data (archaeological work, as demonstrated in Chapter Two) which supports the practices suggested by Law. Clarke's tool of situational mapping provides a productive way to identify and represent data which enables the researcher to gather the dispersed, heterogenous elements of an apparatus. Clarke (2015, p. 289) argues that situational maps "lay out the human, nonhuman, discursive, and other elements in the research situation of concern and provoke analysis of relations among them". The situational maps which Clarke developed are useful guides for locating knowledge, documents, and discourses. Clarke (2015, p. 289) claims that they:

> do particular kinds of work through mapping and framing historical as well as contemporary materials. Together they lay out the key actors and actants, key social worlds and arenas, key discourses, and key axes of conflict, specifying the positions taken and not taken in the data, implicated actors, silent actors, missing discourses,

> and so on. While potentially useful in most if not all research, situational maps and analyses can be distinctively helpful in taking on understudied or unstudied larger historical projects.

Identifying and describing "implicated actors, silent actors, missing discourses" has been critical to this work, to mapping an apparatus, and to identifying the "subjugated knowledges" that are discussed in this thesis. As Tamboukou (1999, p. 214) suggests:

> Foucault is careful with minor textual details, scrupulously citing his examples, commenting on their structure, following the "order of their discourse", comparing and juxtaposing them, tracing their repetition, recurrence or even disappearance in relation to the era, the philosophical school or even the historical personalities they were adopted by.

This practice of mapping was a productive initial engagement with the construction of an archive, and for considering which elements would be considered for analysis in this research. The elements in focus have developed, been modified, made absent, explored in greater detail as the research has emerged, and as I have come to develop a more reflexive, focused and genealogical approach to the research that accounts for silence, absence, subjugated knowledge and discontinuity.

Vucetic's (2011) three E framework has also been important as a way of identifying which historical moments, documents, actors and discourses can be made subject to analysis. Vucetic defines episodes and examples as conceptual tools which can help to identify and organise power/knowledge/subject relations within particular historical contexts. Vucetic (2011, p. 1312) argues that these tools are important for developing an effective history by "analysing the power/knowledge nexus" through "episodes and examples" which can enable "empirical claims not normally accessible by any other methodology".

Episodes, Vucetic (2011, p. 1300) describes, are also known as "historical series, epochs, events or moments", and are important terms used throughout this work to "perioditise" some

of the elements represented in the situational map and to the apparatus. Describing an episode or epoch serves to "perioditise the history of an object under study" (Vucetic, 2011, p.1300). Vucetic (2011, p. 1300) emphasises that episodes are "narrated though examples which are themselves reconstructed in a discourse analysis of historical documents ranging from diaries left behind by marginal authors to programmatic or pioneering statements on how to maintain social order".

Perioditising clusters of elements as episodes is important and the challenge in this work has been how to identify the most appropriate examples to describe a particular episode. According to Vucetic (2011, p. 1301), Foucault selected episodes and examples for analysis based on criteria of what he understood as "hard/least likely, easy/most likely, maximum variation or anomalous/extreme/deviant/outlying or paradigmatic". Similar to perioditisation, "eventalisation" is also a useful way of identifying and analysing historical materials and discourses. In *Foucault Live: Collected Interviews, 1961–1984* (1996, p. 277) Foucault argues that eventalisation is about "making visible a singularity at places where there is a temptation to invoke a historical constant". For example, Foucault (1996, p. 277) states:

> it wasn't as a matter of course that mad people came to be regarded as mentally ill; it wasn't self-evident that the only thing to be done with a criminal was to lock them up; it wasn't self-evident that the causes of illness were to be sought through individual examination of bodies; and so on.

By identifying an event in the historical constitution of a problem, the genealogist is able to discuss and unsettle what might appear self-evident in the present. And the unsettling of these self-evidences "on which our knowledges, acquiescences and practices rest" can be achieved by "rediscovering the connections, encounters, supports, blockages, plays of forces, strategies and so on which at a given moment establish what subsequently counts as being self-evident, universal and necessary" (Foucault, 1996, p. 277).

This practice of eventalisation, Foucault (1996, p. 278) argues, also acts as a "multiplication or pluralisation of causes" which dissolves the assumption that things had always been as they are. This practice of bringing complexity to what might be a self-evident as a singular event, is about "lightening the weight of causality" by analysing its process as a "polyhedron of intelligibility" (Foucault, 1996, p. 278). The genealogist should "decompose" the process under analysis to rediscover its relation to "external relations of intelligibility" (Foucault, 1996, p. 278). For example, "the more one analyses the process of 'carceralisation' of penal practice down to its smallest details, the more one is led to relate them to such practices as schooling, military discipline, etc." (Foucault, 1996, p. 277).

These methods of periodisation of episodes and eventalisation are supported by identifying and analysing significant and consequential examples from the archive. I have taken this approach in deciding which reports, events, moments, documents and organisations to discuss in this thesis. As discussed earlier, genealogical research aims to be both critical, and effective, and this depends on the researcher's ability to capture episodes, events and provide examples which capture and explain the strategic aims of the apparatus. This thesis aims to develop both a critical and effective genealogy of contemporary problematisations of young people, twenty-first century skills and uncertain futures in a neo-liberal education apparatus in Australia. The concepts and methods outlined in this section, have provided me with some tools to carry out the archaeological, archival, gathering work required in setting up this genealogical analysis.

Silence and Subjugated Knowledges

I conclude this anti-methodological chapter with a summary of how these tools enable me to work towards the reappearance of knowledges which have been silenced or subjugated in these emergences. This genealogical study aims to be an impetus or starting point for the

rediscovery and reappearance of knowledges subjugated during the emergence of Australia's neo-liberal education apparatus and the problematisation of young people as needing to develop twenty-first century skills. In *Society Must Be Defended: Lectures at the Collège de France 1975–76*, Foucault (1997b, p. 7) argues that subjugated knowledges are the "historical contents that have been buried or masked in functional coherences or formal systematizations" and the "blocks of historical knowledges that were present in the functional and systematic ensembles, but which were masked". Foucault (1997b, p. 7) describes how there are:

> a whole series of knowledges that have been disqualified as nonconceptual knowledges, as insufficiently elaborated knowledges: naïve knowledges, hierarchically inferior knowledges, knowledges that are below the required level of erudition or scientificity.

With the "tools of scholarship" he (Foucault, 1997b, p. 8) asserts that we can cause "marginal", "disqualified" knowledges, that are "local, regional or differential, incapable of unanimity" to reappear. Foucault (1997b, p. 8) argues that genealogy is about doing scholarly work which can reactivate these "local memories", to produce "a historical knowledge of struggles" which can be used to enact change. In the arguments and analyses that I develop in later chapters, I will suggest that these subjugated knowledges include blocks of historical knowledges such as the complexities and messiness of young people's lives, the increased regulation of young people's individual responsibilities through discourses of enterprise and aspiration, intergenerational justice, a crisis of precarious work, different ways of knowing time–space, what the future holds in terms of work and the planet, and different ways of being and becoming in relation to education and work. Analysis of subjugated knowledge provides a means by which to disrupt dominant ways of knowing:

> It is a way of playing local, discontinuous, disqualified or nonlegitimised knowledges off against the unitary theoretical instance that claims to be able to filter them,

> organise them into a hierarchy, organise them in the name of a true body of knowledge, in the name of the rights of a science that is in the hands of the few (Foucault, 1997b, p. 9).

It must be noted in concluding this chapter, that the identification and analysis of subjugated knowledges, has an affinity with, but differs from the concept of "situated knowledges" that many feminist and post-humanist scholars have developed during the last five decades (Braidotti, 2013; 2019; Haraway, 2015). Bacchi (2018, n.p.) has discussed this distinction and argues that "the two terms sound similar and appear to do similar things, drawing attention to 'minority' or 'oppressed' points of view". However, citing Foucault, Bacchi (2018, n.p.) suggests that with subjugated knowledges, the focus is on the analytical task of contributing to an "insurrection of knowledges" in order to challenge "the centralising powers linked to the institution and functioning of an organised scientific discourse".

Rosi Braidotti (2019, p. 118) asserts that the re-emergence of "situated knowledges" is concerned with the re-emergence of "indigenous knowledge systems", "feminists, queers, otherwise enabled, non-humans or technologically mediated existences" as the "real-life subjects whose knowledge never made it into any of the official cartographies or genealogies". Sarah Truman (2019, p. 32) also argues that "Situated knowledges are immanent to an event, account for intersectional markers such as race, gender, sexuality, class, ability". As described in the Prelude, the young people's stories that are included in this thesis can be illustrative of some forms of situated knowledge made absent as Other in dominant discourses. However, the main genealogical project here is to focus on the dominant relations of power/knowledge/subjects, and those forms of knowledge and subjectivities, those ways of being and becoming, which have been subjugated, silenced, made absent in the emergence of discourses of twenty-first century skills and uncertain futures in Australia's neo-liberal education apparatus.

The discussion sections in each of the chapters that follow are framed by an examination of the dominant, and the subjugated knowledges which give shape to particular relations of power/knowledge/subjects in this apparatus. Drawing on the examples, reports, policies and declarations in each chapter, these thematic discussions are framed by the particular "marginal" and "disqualified" knowledges identified (Foucault, 1997b, p. 8). These themes, and others discussed, provide starting points for the arguments made and developed in the Coda.

Interlude – Rosie's Story

Rosie's story was first published in a paper titled "COVID-19 and young people's 'Future Presents': lockdown stories from the Anthropocene", that was published in the *Journal of Youth Studies* (Kelly, Brown & Goring 2022a). Our intent in that paper was to situate the pandemic, the social, cultural, economic and political responses to the pandemic, and the challenges and opportunities that this public health crisis produces for young people's health and wellbeing, their education, training and employment pathways, and their sense of belonging, connectedness, even community, in the broader, unfolding crises of global capitalism, of earth systems, and of bio-diversity that is heralded by the Anthropocene (Haraway, 2016).

In developing that argument, we drew on some of the outcomes of a place-based scenario planning project in Melbourne's (Australia) inner northern suburbs that was undertaken in the last half of 2020. The project, titled "COVID-19 Recovery Scenarios for Young People in Melbourne's Inner North", was a collaboration with the Inner Northern Local Learning Employment Network (INLLEN) and its Inner North Youth Employment Taskforce (INYET). As part of that project, we used a video-capture platform (Video Ask) to conduct video interviews with 53 young people during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections during August–November 2020. The project was shaped by a scenario planning methodology and had a future orientation to the year 2025. In that paper we presented the stories of three young people from the midst of Melbourne's second lockdown. In that context, we suggested that these stories were meant to be illustrative and inclusive – but not representative – of some of the concerns, anxieties, uncertainties, and hopes that young people in Melbourne's inner

north gave voice to when we provided them with an opportunity to reflect on and respond to questions about their presents and futures.

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When she was interviewed, Rosie was 18 years old, living in Northcote, in the Darebin LGA, and completing her final year of secondary school online because of the lockdown. Rosie was articulate and passionate about politics, her education, and social justice and had been involved in a number of media interviews during the lockdown. When she spoke with us, she had hopes of studying global politics at university in 2021, but was worried about getting a high enough Australian Tertiary Admissions Rank (ATAR) score, and was starting to consider alternative entry pathways. She was passionately sceptical about the ability and willingness of older generations to respond to the multiple crises she imagined that she, her peers, and the planet were facing. When asked about the future, and her thoughts and feelings about it, Rosie identified a wide range of issues, including Black Lives Matter, the climate crisis, the bushfires that Australia had experienced in the summer of 2019–20, the asylum seeker and refugee crises, discrimination and racism. Rosie said that she felt that governments, businesses and communities were not doing enough to resolve these problems:

> our government needs to understand and open their eyes to what we're contributing to, things like climate change, and how we can help countries less fortunate than us […] we need to turn on our moral obligation key because we are not really doing that at the moment.

This mistrust, even anger, with adult institutions and older generations sat alongside a hope that her generation could rise to these challenges and opportunities – now and in the future:

> I guess overall I'm scared and anxious and I feel like I'm also confident because, you know, my generation, I feel like we are very open, and we've been fighting for a lot, and I think we have to deal with a lot as well. So I feel like we are all going to put in a big effort to deal with the issues that have been left with us.

During the lockdown Rosie appeared in a number of public, televised discussions where she argued for the importance of completing final year exams and returning to face-to-face schooling:

> I also spoke to *The Drum*, on the ABC. Four other kids were saying that we should cancel exams, and I was saying that I don't think we should, because I think that you know, no matter what, no matter what situation you're in, I think we've all worked way too hard over the last 13 years to accomplish our goals and I feel like we still can do that. Even if we're not at school.

Rosie's other great concern at that time focused on the various challenges with online learning – such as the isolation from friends, peers and teachers – and the ways in which COVID had, from her perspective, amplified the inequalities in the VCE:

> I think in the first lockdown, I wrote to *The Ag*e, and I made the point that I think COVID has amplified inequalities in the VCE system. For example, private schools were able to close before we did, and were able to test out their equipment, test out how they were going to run online learning. But for me, like my school's considered a pretty high socio-economic public school, the first two weeks of lockdown, actually the first time we were dealing with system overloading and internet dropouts. And yeah, I think that definitely put us back a lot.

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I first connected with Rosie through her secondary school careers teacher in Melbourne's Inner North. Rosie was also a representative on her local government youth council, which became a key stakeholder in the "COVID-19 Recovery Scenario's" Project. Working with Rosie in 2020, and through follow up interviews in 2021 and 2022, I encountered a significant tension that has come to inform my work. Rosie has provoked me to reconsider what "counts" when thinking about the elements which structure ideas such as youth voice, and young people's participation in both policy and service delivery. Working with Rosie has meant confronting the challenges that come from listening to and trying to understand the concerns that many young people have about "having a voice" and what it means to have that

voice “listened to” and “acted upon” in spaces, and by people who can impact the circumstances that shape their lives.

Rosie’s story is an important Interlude at this point. Her story has enabled me to consider the ways in which many young people want to be heard as stakeholders in shaping their experiences of education, labour markets, communities and futures. The hopes, fears and anxieties about the present and the future that Rosie described, are largely made “manifestly absent” (Law, 2004) from the discourses, practices and materiality of Australia’s neo-Liberal education apparatus. In this way, Rosie’s story presents a challenge to the dominant discourses, mechanisms, and practices discussed in the following chapters. Her story also suggests that young people’s skills, aspirations, and sense of their futures are better understood as “entangled” (Haraway, 2016) in a combination of hopes, fears, anxieties and ambivalence.

The elements that Rosie described, such as inequalities within the VCE system and public school funding, the inadequate moral conduct of governments and businesses, her sense of isolation, anxiety, confidence and hope in her generation, have provoked me to ask questions such as *Which youth voices get heard, and listened to, and who is left out?* Rosie’s story, and the concerns that she gives voice to, can provoke a consideration of the kinds of processes, practices, theories, ethics and approaches needed to produce socially just and sustainable futures. Including, more complex understandings of the relations between the reproduction of inequalities based on class, gender, race, ability, ethnicity through youth voice, participation and futures making projects in global stakeholder networks. Rosie’s story has provided a starting point to consider the ways in which young people’s capacities to participate and to engage in futures making, are shaped through, and entangled with, the dynamics of everyday life (Coffey, 2020, p. 70).

Chapter Two: The Emergence of Australia's Neo-Liberal Education Apparatus

Introduction

This chapter tells a version of the emergence of what I call Australia's neo-liberal education apparatus during the last five decades. This apparatus can be imagined as a dispersed and diverse network of elements and relations which have given shape to contemporary understandings of the relations between young people, education and uncertain futures. The version of this story that I tell here brings together and describes the relations between a series of events and diverse and dispersed elements which share the common aim of shaping young people, education systems and structures, to align with the demands of uncertain futures and labour markets. For Foucault (1997b, p. 10), the project of making "disorderly and tattered genealogies" is to "reactivate local knowledges". This is a particularly relevant aim in the context of the production and reproduction of universal models of young people, twenty-first century skills and uncertain futures. In order to do this genealogical work in Part Two and Part Three, this chapter introduces some of the key elements in Australia's neo-liberal education apparatus, and signals a number of those subjugated elements. The education apparatus discussed in this chapter is one which seeks "to manage and to successfully incorporate, subsume, or at least nullify" the "disparate and problematic" (Hardy, 2015, p. 200). This chapter is an archaeological account of "the connections, encounters, supports, blockages, plays of forces, strategies" which make up the conditions that have enabled the historical emergence of this apparatus (Foucault, 1996, p. 277). Contemporary ways of doing education, skills and futures do not occupy a fixed, static state of being; nor do they have a transformative endpoint. They are contingent on a complex ensemble of elements, including the ministerial councils, actors, networks, non-government organisations, politicians, union leaders, schools, think tanks, declarations and curriculum, power/knowledge/subject relations and governmental logics introduced in this chapter.

This chapter is structured around an analysis of a series of four declarations including *The Hobart Declaration on Schooling (1989), The Melbourne Declaration on Educational Goals for Young Australians* (2008), *The Adelaide Declaration on National Goals for Schooling in the* twenty-first *Century* (1999) and *The Alice Springs (Mparntwe) Education Declaration* (2019). These declarations can be understood as events because they condense various elements which shape how education, young people and their futures have been made knowable within Australia's neo-liberal education apparatus in the present, and as problems of government since the late 1980s in Australia. The story of the emergence of this apparatus is told against the backdrop of an epoch in neo-liberal capitalism and government, during which time education systems and the behaviours and dispositions of young people have been treated as problems which require fixing, in relation to futures of work and the planet that are made knowable as being uncertain.[18]

In Australia, each decade, over the past five decades, a declaration on the national goals for schooling, education and young people has been produced at the ministerial level of federal, state and territory governments. Between 1989 and 2019, this series of declarations have represented, in quite particular configurations of power/knowledge/subjects, the kinds of changes, continuities and discontinuities which have taken place in Australian economic, social and political life, and which are understood, within particular rationalities, as being relevant to the governance of education and young people. These declarations signal key events in the unfolding of a neo-liberal version of capitalism and government, and the reconstruction of education systems, structures and practices in Australia in line with the

[18] As I have indicated in the discussion about governmentality in Chapter One, and return to in reference to Rose and Miller (1992) in the final section of Chapter Two, there are nuances and distinct meanings to the terms governmentality, government, and the state. In an analysis of the assemblage of Australia's education apparatus, I describe some of the relations of power between state and federal levels of "government" in Australia and also the character of neo-liberal "governmentality". The nuances here are important, and I draw on different work to frame these discussions and the use of these terms at different points.

needs of this governmentality. In this research, neo-liberalism is understood not only as a set of economic and political policy reforms, but also as discourses for thinking about ways of governing social, cultural, economic and political life, and the forms of subjectivity that individuals need to practice to succeed in these contexts. For Steger and Roy (2010, p. 12) neo-liberal logics are:

> rooted in entrepreneurial values such as competitiveness, self-interest, and decentralisation. It celebrates individual empowerment, and the devolution of central state power to smaller localised units. Such a neoliberal mode of governance adopts the self-regulating free market as the model for proper government. Rather than operating along more traditional lines of pursuing the public good (rather than profits) by enhancing civil society and social justice, neoliberals call for the employment of government technologies that are taken from the world of business and commerce.

I will demonstrate that in these governmentalities, state power is devolved across a wide range of globally dispersed actors, organisations and networks in order that these market-oriented logics can be produced and sustained. Many argue that neo-liberalism signifies a rationality of government that has caused growing wealth inequalities across nations, and the apparent inability of governments to intervene in economic markets (Piketty, 2014, p. 514). In this view, a neo-liberal governmentality is comprised of rationalities and practices across both economic and social life, rooted in values such as competitiveness and individualism. Here, human behaviours and dispositions are understood as forms of capital to be developed and exchanged. As many argue, this approach has transformed education systems and structures, and has been subject to critique for its focus on mobilising processes of commodification of human behaviour (Ball, 2009), and the production of "ideal subjects" as "homo economicus" (Brown, 2015, p. 10). For example, critiques of neo-liberalism have included arguments about the problem of the emergence of the self as enterprise (Kelly, 2013) and the managerialisation of personal identity and relations (Burchell at al., 1991). I also suggest that more critical and complex encounters with, for example, neo-liberalism

and/or capitalism, global capitalism (Hutton & Giddens, 2000), liquid, heavy and light capitalism (Bauman, 2000), and/or surveillance capitalism (Zuboff, 2019) are made absent from discussions, reports and declarations produced through the key agencies and organisations in this education apparatus.

The term neo-liberalism has also been used to capture the character of contemporary ways of knowing and governing young people, youth labour markets and education systems, particularly in terms of who/what young people are imagined as needing to become. On this point, Kelly (2006, pp. 28–29) affirms that:

> It is not that 'initiative', 'enterprise', 'responsibility' or 'activity' are not worthwhile human capacities. It would be difficult to imagine any form of human achievement without these characteristics. Rather, it is that within the frame of an entrepreneurial Selfhood, as it is imagined at the turn of the second millennium CE, 'initiative', 'enterprise', 'responsibility' and 'activity' are narrowly imagined in relation to the performance of exchange relations in the extended order of capitalist markets – of all sorts. Moreover, it is a concern that these markets – characterised always by the possibility and promise of greed, deception, monopoly, winners and losers, inequities – also, at this time, penetrate all aspects of human being in the world (reproduction, sex, organ transplants, education, health, unemployment, services for the poor, aid, life management, futures, etc.) in a digitally enhanced, globalised market space. And we must all assume an entrepreneurial disposition to this lifeform. We fail to do so at our own risk.

The discourses that are mobilised through this series of declarations, and which aim to capture what young people can and should do, include particular understandings of human capacities and behaviours. However, what is important in this chapter is the ways in which discourses of young people, education, skills and futures found in the *Hobart*, *Adelaide*, *Melbourne* and *Alice Springs (Mparntwe)* declarations reproduce those discourses mobilised at a global level by bodies such as the OECD and the WEF. These declarations establish the conditions for the further development of other events, policies and curriculum, and are events which have amplified and articulated the relations between education, young people and futures with the needs of the economy and the labour market. It is in this sense, as I

discuss in what follows, that neo-liberal governmentalities do not appear from nowhere. The apparatus discussed here is "the network that is established between these elements", and which performs the "concrete strategic function" of imagining young people, education and the future as problems of government in a neo-liberal version of capitalism (Agamben, 2009, p. 14). However, as John Law (2004, p. 85) argues, the apparatus and the governmentalities that shape the relations between its elements are "always limited, always potentially contestable. How it might be crafted is endlessly uncertain, endlessly revisable".

Reconstructing Education in the Age of Neo-Liberal Capitalism: Key Events in Australia from 1989 to 2019

The Hobart Declaration on Schooling (1989)

The Hobart Declaration on Schooling (AEC, 1989) was produced at a time of significant economic reform in Australia. As I discuss here, the Hawke Labor government's multiple Accords and the key document *Australia Reconstructed*, which was published in 1987, played important roles in laying the conditions for the production of the *Hobart Declaration*. Australia's Federal Labor government leaders at the time, Prime Minister Bob Hawke and Treasurer Paul Keating, were in power from 1983–1991 during a series of reforms that opened Australia's economy to the world after decades of protectionism and stagflation. These shifts can be understood as a part of increased and intensified economically (neo)liberal policies, promoted and implemented, most significantly in a global sense, by Prime Minister Margaret Thatcher in the UK and President Ronald Reagan in the USA. The promotion of reforms by Thatcher and Reagan, and Hawke and Keating in Australia, can be understood to have fundamentally reshaped economic policies and the role of governments (Savage, 2017, p. 146). Known as "Thatcherism" in the UK, "Reaganomics" in the USA, and "economic rationalism" in Australia, these different, but related, reforms focused on the role of competition and the deregulated economic policies in the governance of society, and

advocated for minimal state involvement and intervention, resulting in a range of actions, such as the privatisation of formerly state-owned and -provided assets and services. This involved selling and transferring responsibilities for government services such as health and education to private companies, transforming regulation of markets, cutting government spending, reducing the size of some government departments and agencies, and promoting de-unionisation (Savage, 2017, p. 146). During this period, and the years that followed, significant economic and social policies and programs emerged which were framed by discourses of deregulation, reconstruction, flexibility, free-market rationalities, economic rationalism and others. For many commentators, these discourses signalled increased opportunity, freedom and choice for individuals.[19] However, as I discuss, these discourses also signalled techniques of governance that involved new systems of accountability and responsibility for individuals, families, communities and schools.

These programs and reforms took a particular character in Australia, where they were characterised as a form of macroeconomic policy called "economic rationalism" (Pusey, 1991; 2018). During the 1980s and early 90s in Australia, this approach to policy was mobilised through the Prices and Incomes Accord agreements between the Australian Federal Government and the trade union movement (Forsyth & Holbrook, 2017). While the more socially progressive policies of the Hawke era were unlike the deeply socially conservative policies of Thatcher and Reagan's leadership, the Prices and Incomes Accords established the grounds for a trajectory of neo-liberal economic reform in Australia over subsequent decades (Forsyth & Holbrook, 2017). First established between the then newly elected federal Labor government and the representatives of Australia's trades unions in 1983, the Accord

[19] As Miller and Rose (2008), and other governmentality theorists, have argued, Milton and Rose Friedman's (1990) *Free to Choose* and Friedrich Hayek's (1976) *Road to Serfdom,* originally published in 1944, were significant texts in the emerging discourses and practices of Reaganism and Thatcherism, and what would come to be named as neo-Liberalism.

agreements have been positioned as enabling some significant economic reform. The initial idea for collaboration between the Australian Council of Trade Unions (ACTU) and Labor, emerged in the final days of the Federal Whitlam Labor government in the early-mid 1970s.[20]

At that time the Australian economy was in deep crisis, and electoral support for the Labor government had deteriorated. Union demands for wage increases and industrial disputes had damaged the Whitlam government. On the night that Gough Whitlam addressed a hostile ACTU congress at South Melbourne Town Hall in 1975, Laurie Carmichael, one of the Left's most influential union leaders, and fellow unionist Bill Kelty, discussed the possibility of a formal agreement between the union movement and the Labor party, before they would return to government years later (Forsyth & Holbrook, 2017). Carmichael, Kelty, ACTU research officer Jan Marsh and Ralph Willis, then shadow minister for industrial relations (who is considered the architect of the Accord), would make the agreement a reality before the federal election of 1983 (Drum, 2018).

In 1982, the economy was in a "parlous state with inflation at 11 per cent, 7 per cent unemployment and negative growth" (Drum, 2018, n.p.). The histories of the Accord agreements and the trajectories of economic rationalism in Australia have been discussed widely since the 1990s. For example, Michael Pusey (2018, p. 12) summarises the "economic

[20] While this research does not include a detailed account of the Accords, they are important elements in shaping the strategic relations, discourses and purposes of Australia's neo-liberal education apparatus as it was emerging during the 1980s and 90s. *The Hawke Government: A Critical Retrospective,* edited by Susan Ryan and Troy Bramston (2003) includes a series of essays from cabinet ministers and commentators reflecting on Hawke's leadership and legacies such as the Prices and Incomes Accords. Chris Wright (2014, p. 264) has produced some critical analysis of the Accords between the Hawke–Keating government and the ACTU, and argued that they provided a more "equitable alternative to neoliberal approaches adopted elsewhere" and yet "negative unintended consequences of the Accord years remain features of the contemporary labour market". These include, "the growth of precarious work, informal business arrangements, wage inequality and excessive executive salaries" (2014, p. 268). Wright (2014, p. 268), citing Keith Hancock, argues that the Accords "assisted the Hawke-Keating government's goal of facilitating structural adjustment in the Australian economy by allowing greater wages flexibility in the face of increased international pressure". However, "the Accord had little discernible lasting effect on productivity" which "casts some doubt on its long-term economic benefit".

rationalism debate" which "reversed Australia's historic nation building legacy" and "radically reduced the coordinating role of the state in most areas of public policy".[21] In terms of its impact on education reform, Colin Symes (1995, p. 250) states that the *Finn, Mayer and Carmichael* reports, which I will discuss in greater detail shortly, brought this way of doing public policy into education and training. Symes (1995, p. 250) alleges that the amplification of the connections between these economic policies, education and training:

> assisted in giving force and import to the centrality of work in the moral fabric of modern society and have been singularly successful in creating the impression that human worth is correlated with industry and exertion […] Through its manifold practices, the school is an important moral technology assisting to legitimate and valorise the work ethic.

Symes (1995) argues that the character of the relationship and nexus between education, schooling, training and work, was, in Australia during the last decades of the twentieth century, unlike its manifestations in the past. For Symes, in an emerging, globalised, free-market place, the productivity and health of the nation, its education systems and labour markets, was best understood in terms of investment, quantity and quality of human capital, or skill development.

In 1983, the then Liberal (conservative) Prime Minister Malcom Fraser called an election, which he lost. Parliamentary leader of the Labor Party Bob Hawke was sworn in as the twenty-third Prime Minister of Australia in March 1983. Hawke saw the Accord agreements

[21] Michael Pusey popularised the term "economic rationalism" following the publication of *Economic Rationalism in Canberra* in 1991, and which he revisited in "Economic rationalism in Canberra 25 years on?" for the *Journal of Sociology* in 2018. Pusey (2018, pp. 13–14) suggested that for policy makers and senior public servants in Australia during the 1980s, economic management was "reduced to little more than the protection and accumulation of capital" in contrast to improving "the quality of life of a nation-society" which characterised the post-war period. In tracing the impact of Pusey's original text, Barnes et al. (2018, p. 3) acknowledged the significance of "economic rationalism" as one way of understanding the "competing interpretations of neoliberalism" as a governmental logic which "persists as a framework for policies, policymakers and social orders". The concept is important to the discussions here, as it is an influential discourse which signifies characteristics of social and economic systems and reforms akin to "neo-liberalism", and which had a significant influence on the emergence of skills discourses in the *Finn, Mayer* and *Carmichael* reports.

as necessary to enable the structural reforms that would modernise the Australian economy. In a reflection on this process shortly before his death in 2019, Hawke claimed that:

> The concept is we would provide improvements, particularly in health and education, which they [the unions] would regard as an offset to increase in money wages, so they wouldn't look for the same degree of increase. That meant they were protected, employers didn't have to pay as much, so it increased their competitive position. That was the overall concept of justice all round (Drum, 2018, n.p.).

Hawke's approach to restructuring public services, social institutions and reform and collaboration with unions stands in contrast to Margaret Thatcher's approach to economic and social policy reform in the UK. In an interview in *Woman's Own* magazine in 1987, Thatcher is famously quoted as stating her position on society:

> They are casting their problems at society. And, you know, there's no such thing as society. There are individual men and women and there are families. And no government can do anything except through people, and people must look after themselves first. It is our duty to look after ourselves and then, also, to look after our neighbours (*The Guardian*, 2013, n.p.).

In 1984 the Labor government reported that in Australia "since April 1983 employment growth was at 3.3 per cent – the highest in the OECD, unemployment had fallen more than 2 per cent" (Drum, 2018, n.p.). In addition, "1.3 million working days had been lost to industrial disputes, the lowest number since 1968" (*Drum*, 2018, n.p.). The Accord Mark I, and the brief period that followed, saw a collaboration between unions, government and industry. In September 1985, the government and the ACTU recommitted to the Accord Mark II, the key features of which included the government making deals to administer tax cuts, and introduce 3 per cent award-based superannuation, with the ACTU accepting a 2 per cent reduction of the wage rise based on the Consumer Price Index (CPI) (Ryan & Bramston, 2003). Accord agreements would be made in response to various economic and social problems over the period of February 1983 until October 1991. Reforms enacted under the banner of Accords Mark I – VIII (the Accord Mark VIII was never implemented) included,

for example, changes to award wages through two-tier wage fixation, and the introduction of structural-efficiency principles and enterprise bargaining (Ryan & Bramston, 2003).

During the production of the Accords Marks I–VIII and neo-liberal labour market and economic reform, focus was shifting from school-based curriculum development and general education toward vocational education. There are a number of key episodes at this time that would inform and shape the emergence of the *Hobart Declaration*.

During this period the Labor Minister for Education John Dawkins (1987–1991) would play a vital part in this shift. He held this role throughout the formation of the *Hobart Declaration* in 1989. "The Dawkins Revolution", as it has been remembered among many higher education academics and administrators, included various reforms outlined in *Higher Education: a Policy Discussion Paper* (1987) produced by the Australian Department of Employment, Education and Training (DEET). These reforms included the expansion and forced merger of Australian Universities and former Colleges of Technical and Further Education, and the reintroduction of university fees in the form of the Higher Education Contribution Scheme (HECS).

Australia Reconstructed: ACTU/TDC Mission to Western Europe. A report by the mission members to the ACTU and the TDC, was produced by the Australian Council of Trade Unions and Trade Development Council in 1987. This report made significant recommendations, some of which were endorsed by Minister Dawkins. These included broad-based training and educational strategies to accommodate the needs of business and industry, and which were centred on calls for greater labour market flexibility and development of generic skills. *Australia Reconstructed* (ACTU & TDC, 1987) was a key document that set the conditions for the production of the *Hobart Declaration* (1989). It included a number of key recommendations that sought to problematise schooling and

education as needing to align with training and labour market needs through skills development. The Australian Council of Trade Unions (ACTU) and Trade Development Council (TDC), the Australian Education Council (AEC), the Department of Employment, Education and Training (DEET) and the documents that they produced around this time made it possible for employability skills, capabilities and competencies discourses to become dominant in problematisations of young people, education and schooling in the following years. Figure 2.1 below (ACTU & TDC, 1987, p. 155) captures the ways in which the ACTU sought to imagine these relations and the reconstruction that was imagined as needing to take place.

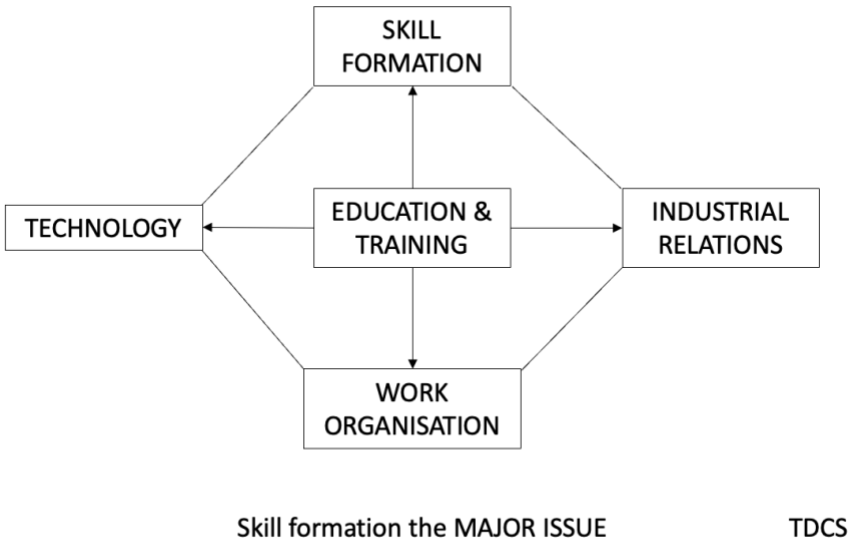


Figure 2.1 Skill Formation (ACTU & TDC, 1987, p. 155)

Australia Reconstructed was produced from and following a visit to Sweden in 1985 by ACTU delegate Laurie Carmichael. Carmichael was a trade unionist and a communist. Andrew Scott's (2013, p. 144) chapter on the social and political context surrounding this period, titled "Australia reconstructed", in Andrew Reeves' and Andrew Dettmer's (2013)

Organise, educate, control: the AMWU in Australia, 1852–2012, outlined Carmichael's reflections on his visit, and the meetings held with the International Labour Organisation (ILO), and the Swedish National Bank:

> Carmichael suggested that current industrial trends 'create […] a big […] opportunity to negotiate better working conditions and work practices', and that the Swedish unions, in their attitude to this opportunity, had placed themselves 'in the forefront of the world's working class movements'.

This initial visit prompted a delegation from the ACTU to visit Sweden, and many of the findings and recommendations for reform in Australia emerged from *Australia Reconstructed*. Scott's (2013, p. 146) narrative about *Australia Reconstructed* captures the impact of the document:

> Australia Reconstructed remains the most comprehensive policy manifesto ever published by the mainstream left in Australia. It continued the concern about Australia's excessive economic reliance on extracting and shipping out resources rather than adding value to products, which had been expressed in a series of pamphlets published from the second half of the 1970s by the AMWU. Following those publications, which had criticised Australia's policy direction in the Fraser government years (1975–1983), the union delegation put forward positive policy solutions in Australia Reconstructed for the Hawke Labor government, elected in 1983, to pursue.

Scott (2013, p. 146) summarises how *Australia Reconstructed* criticised some policies of the Labor government that partly funded the mission, and emphasised:

> the achievements of Sweden's model of pursuing full employment by reducing market wage differentials, ensuring an adequate social wage, and improving the mobility and skills of the labour force through comprehensive, active labour-market programs.

Australia Reconstructed also included descriptions of the importance of young people's skill formation to the nation's capacity for innovation. The report identified four key "elements of active labour market policy" (ACTU & TDC, 1987, p. 107):

- job placement (matching supply and demand)

- the reduction of labour market segmentation
- to enhance overall flexibility and equity
- and payment of unemployment benefits as a last resort.

The ACTU & TDC (1987, p. 107) highlight that "The most striking aspect of active labour market policies is the emphasis placed on skill formation, skill enhancement, skill flexibility and overall training". The prominence of skills discourses marked an increase in the role of industry stakeholders in defining the responsibilities of individuals and schools in needing to respond to the needs of labour markets and the futures imagined by/for those stakeholders. The report states that while causes of youth unemployment differed among the countries visited, "those countries with the best employment record for youth base their policy formulation on issues like education, training and employment services and not exclusively on the incentive of wages". The report (ACTU & TDC, 1987, p. 110) also states that:

> The Swedes are aware that young people as a group are a primary candidate for unemployment and have taken specific steps to ensure that young people are not disadvantaged. Sweden begins its heavy investment in young people in the school system.

In the "Inadequate Skills Formation and Enhancement" section of *Australia Reconstructed* (ACTU, 1987, p. 118), education and training are represented as needing to become "an essential component of long-term corporate strategies to maintain and strengthen competitive advantage". *Australia Reconstructed* was a key event in producing discourses of skills, and capabilities, about what young people need, and what they might lack.

Just two years after *Australia Reconstructed* was published, Australia's state, territory and Commonwealth ministers of education met from the 14–16 April 1989 as the sixtieth Australian Education Council in Hobart. Chaired by the then Minister for Education in Tasmania Peter Rae, the council met with the aim to act jointly to assist Australian schools in

meeting the challenges of those times, noting that "the schooling of Australia's children is the foundation on which to build our future as a nation" (AEC, 1989, n.p.). It was the first time in Australia that a national agreement was made to address areas of common educational concern, with the state, territory and Commonwealth ministers of education making a commitment to improving Australian schooling within a framework of national collaboration.

The Hobart Declaration outlined ten national goals for schooling that were intended to assist schools and school systems to develop new objectives and strategies, particularly in the areas of curriculum and assessment. The agreed national goals for schooling include the following aims (AEC, 1989, n.p.):

1. To provide an excellent education for all young people, being one which develops their talents and capacities to full potential, and is relevant to the social, cultural and economic needs of the nation.

2. To enable all students to achieve high standards of learning and to develop self confidence, optimism, high self-esteem, respect for others, and achievement of personal excellence.

3. To promote equality of educational opportunities, and to provide for groups with special learning requirements.

4. To respond to the current and emerging economic and social needs of the nation, and to provide those skills which will allow students maximum flexibility and adaptability in their future employment and other aspects of life.

5. To provide a foundation for further education and training, in terms of knowledge and skills, respect for learning and positive attitudes for life-long education.

6. To develop in students:

    - the skills of English literacy, including skills in listening, speaking, reading and writing;

    - skills of numeracy, and other mathematical skills;

    - skills of analysis and problem-solving;

    - skills of information processing and computing;

- an understanding of the role of science and technology in society, together with scientific and technological skills;
- a knowledge and appreciation of Australia's historical and geographical context;
- a knowledge of languages other than English;
- an appreciation of and understanding of, and confidence to participate in, the creative arts;
- an understanding of, and concern for, balanced development and the global environment; and
- a capacity to exercise judgement in matters of morality, ethics and social justice.

7. To develop knowledge, skills, attitudes and values which will enable students to participate as active and informed citizens in our democratic Australian society within an international context.
8. To provide students with an understanding and respect for our cultural heritage including the particular cultural background of Aboriginal and ethnic groups.
9. To provide for the physical development and personal health and fitness of students, and for the creative use of leisure time.
10. To provide appropriate career education and knowledge of the world of work, including an understanding of the nature and place of work in our society.

The agreed national goals for schooling captured in the *Hobart Declaration* (1989) included representations of the character traits, dispositions and attitudes of Australian school students which would ensure they were well prepared for an increasingly flexible and globalised economy. In the *Hobart Declaration* (1989, n.p.) these representations find expression in goals such as "To respond to the current and emerging economic and social needs of the nation, and to provide those skills which will allow students maximum flexibility and adaptability in their future employment and other aspects of life".

These skills, the declaration states, include not only a range of literacies, but also the attitudes that schooling should produce. For example, the *Hobart Declaration* (1989, n.p.) states that schooling needs to provide young people with a foundation to develop "optimism", "positive

attitudes for life-long education", "an understanding of, and concern for, balanced development and the global environment", "a capacity to exercise judgement in matters of morality, ethics and social justice" and to become "active and informed citizens". This discourse highlights an important relation between emerging neo-liberal economic policies of deregulation, flexibility and competition, and the role of young people, students, teachers and schools in taking additional responsibilities in these contexts.

Traces of these discourses appear in the *Hobart Declaration* (AEC, 1989, n.p.) in statements which seek to amplify the school–work nexus, including through claims about the importance of "career education and knowledge of the world of work, including an understanding of the nature and place of work in our society". The *Hobart Declaration* (1989, n.p.) also states that schooling should provide students with the skills of "maximum flexibility and adaptability in their future employment", so that they are able to respond to "emerging economic and social needs of the nation". In this context, the *Hobart Declaration* can be understood as a key event in the expansion of the remit of schools to cover the knowledge, skills, attitudes and values "which will enable students to participate as active and informed citizens in our democratic Australian society within an international context" and in relation to the needs of labour markets in a global economy. These relations and changes enabled knowledges of employability skills to emerge, and for school-based and localised knowledges and curriculum development to be made absent in exchange for universalised models of education and schooling. These changes took shape against a backdrop of deregulated labour markets, free-trade agreements, the Prices and Incomes Accords, and a desire for a competitive Australian economy in global markets. They signalled "a profusion of shifting alliances between diverse authorities" in order "to govern a multitude of facets of economic activity, social life and individual conduct" (Rose & Miller, 1992, p. 174). They also heralded the promise of increased freedom and choice that would come with processes of deregulation,

and “the growth of precarious work, informal business arrangements, wage inequality and excessive executive salaries” (Wright, 2014, p. 268).

Prior to 1989, there was no formal national document established with the aim to outline the goals and purposes of education, and the character traits, behaviours and dispositions that young people needed to develop in relation to the future. As such, the *Hobart Declaration* signalled the emergence of a new mode of governance in education and schooling systems which had major implications for the accountabilities of schools, their reporting mechanisms, and the development of new state and, eventually, national curricula. The *Hobart Declaration* emerged against a backdrop of amplified relations between globalised, market-oriented policy reform, and Australian federal economic and labour market restructuring, emerging discourses about skills formation, and Accords between trades unions and the Labor government. The production of policies and manifestos such as *Australia Reconstructed* (1987), and the translation of some of these ideas into education systems can be clearly seen in the *Hobart Declaration.* Neo-liberal education restructuring would continue to emerge (though not without disruption and discontinuity) in the years that followed as the national declaration became a *series* of events, and as they became a part of the histories of the formal governance of education in Australia.

In the late 1980s, as schools and communities worked to make sense of the new goals for schooling, partnerships between government, unions and industry were investigating ways of establishing more explicit links, pathways, and a skills agenda that would reflect the needs of changing labour markets, industries and areas of economic growth. Just prior to the *Hobart Declaration*, in October 1988, The Australian Education Council (AEC) established a working party to investigate the connections between schools and TAFE (Technical and Further Education). In June 1990 the working party’s report was considered by the then

minsters, and it was agreed that a small group of officials would develop an issues paper and recommend an agenda for a major national review of post-compulsory education and training.

Brian Finn, Managing Director of IBM Australia from 1980–1993, and Chairman from 1991 to 1998, was appointed as the Chairman of the Australian Education Council Review of Post-Compulsory Education. This first review and subsequent report was published in 1991 and provided to the AEC and to the ministers of Vocational Education, Employment and Training. Officially titled *Young People's Participation in Post-Compulsory Education and Training*, but more commonly referred to as the *Finn Report*, the report had a focus on young people who had left school and were not participating in any formal education or training. The *Finn Report* (Finn, 1991) proposed a set of national targets for vocational and general education that encompassed schools, higher education, and TAFE, and identified six areas of competence essential for all young people in preparation for employment. The report (Finn, 1991, p. x) lists the "Key Areas of Competence" that were understood to be essential for people engaged in post-compulsory education and training:

- language and communication
- mathematics
- scientific and technological understanding
- cultural understanding
- problem solving
- personal and interpersonal characteristics.

These "areas of competence" speak closely to the discourses of skills which had begun to emerge in the *Hobart Declaration*, and which would be further developed through *Adelaide*,

Melbourne, and *Alice Springs (Mpartnwe)* declarations. The *Finn, Mayer and Carmichael* reports had a major influence on the development of ideas about flexible, globalised labour markets, capabilities, skills and their relations to schooling. Produced in the early 1990s, these three documents built on the work of *Australia Reconstructed*, and the work and skills related aims of the *Hobart Declaration* to deliver reform to Australia's education and training systems.

Following a successful leadership challenge that ousted Labor Prime Minister Bob Hawke, Paul Keating was sworn in as the twenty-fourth Prime Minster of Australia in December 1991. In 1991 and 1992 two additional reports were produced on the ground established by the *Finn Report* (1991), and led by Eric Mayer (in 1992) and Laurie Carmichael (in 1992). Each report contributed to the reconstruction of Australia's national education framework that sought to incorporate training schemes and apprenticeships, technical education and secondary schools, vocational and training institutions and workplaces within one national training system (Meredyth, 1998 p. 23). Denise Meredyth (1998, p. 23) describes how, from a Commonwealth education perspective, the reforms of the time were designed to "construct clear 'pathways' between a mess of unplanned, overlapping institutions". The new system was supposed to provide a common system of certification portable across state barriers and sector differences, to provide a point of negotiation between TAFE's and industries and employers. The development was a series of industry specific competencies required for work in a more flexible and multiskilled workforce (Meredyth, 1998, p. 24).

The *Mayer Report* (1991), titled *Key competencies: report of the Committee to advise the Australian Education Council and Ministers of Vocational Education, Employment and Training on employment-related key competencies for post-compulsory education and training*, outlined seven key competencies, that it claimed were common to workplaces,

schools and training sites. It also claimed to provide a "common language" and a "common framework of description of outcomes" across these previously siloed areas (Mayer, 1992, p. 95). The key competencies that the report stated would best equip workers to take up these active roles are summarised in the *Mayer Report* (1991, pp. 4–5) as:

- Collection, Analysing and Organising Information
- Communicating Ideas and Information
- Planning and Organising Activities
- Working with Others and in Teams
- Using Mathematical Ideas and Techniques
- Solving Problems
- Using Technology

The *Mayer Report* reproduced the key competencies produced in *Finn Report*, including a "standards framework", while defining educational goals and competencies with reference to OECD benchmarks, and German, Swedish, UK and New Zealand competency frameworks (Meredyth, 1998, pp. 24–25). The *Mayer Report* built on the work and recommendations of the *Finn Report* in that it outlined specific principles for nationally consistent assessment and reporting of achievement of seven key competencies. The *Mayer Report* developed the key competencies that it claimed were needed in order for young people to become "multi-skilled, flexible and adaptable" (Meredyth, 1992, p. 3). The report reframed the competencies set out in the *Finn Report* because, as the *Mayer Report* (1992, p. 3) suggests:

> the ideas of flexibility and adaptability suggest the need for a further ingredient which fuses general education with vocational training – made up of the things that enable people to take an active role in making decisions about the work they do and the way it is done and to make the most of opportunities to learn on the job.

Both the *Finn Report* (1991) and *Mayer Report* (1992) sought to define and valorise work-related competencies in conversations about the reconstruction of post-compulsory education in relation to the needs of emerging flexible, multiskilled labour markets.

The last in this trilogy of reports, the *Carmichael Report* (Carmichael, 1992), officially titled *The Australian Vocational Certificate Training System*, was produced by the Employment and Skills Formation Council (ESFC) for the National Board of Employment, Education and Training. It aimed to develop a staged strategy for meeting Australia's training needs from 1991 to 2001. Laurie Carmichael (1925–2018) led this research and report. The *Carmichael Report* built on the reforms outlined in the *Finn* and *Mayer* reports, but was more broadly designed to create structural reform. The Foreword of the *Carmichael Report*, written by Laurie Carmichael (1992, pp. v–vi) as Chair of the Employment and Skills Formation Council (ESFC), provides an overview of the objectives and outcomes of the work. Carmichael's Foreword (1992, pp. v–vi) states that "It is a system that builds on the 'Finn Committee' report on post compulsory education and training. It further develops the means of meeting the growing convergence of work and learning and of general and vocational education". Carmichael's Foreword (1992, pp. v–vi) also states that "this report is not a response to youth unemployment in the current recession. It is much more a response to structural changes in industry and the labour market which are shaping our future for decades to come".

The *Carmichael Report* is a significant document and event in the strategic reconstruction of vocational education and training with the aim of making it more flexible. But also, as the statements above suggests, in the early 1990s, young people, education and schooling were being made knowable and governed as key points of intervention in response to problems of recession, unemployment and changing labour markets. The *Carmichael Report* (1992, p. vii)

indicates the desire at the Australian Federal Government level, to shift the focus of Australian education systems and schools from *inputs* such as time served, toward *outcomes* such as knowledge and skills development. The *Carmichael Report* (1992) was not aimed at addressing the structural conditions impacting unemployment at the time. Instead, it focused on the skills needs of emerging industries, the kinds of capabilities that workers would require in order to navigate these conditions, and the responsibilities of schools in producing the right kind of human capital.

Other important structural changes to educational governance in Australia took place in June 1993 in response to the *Finn*, *Mayer* and *Carmichael* reports. At the time, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) was formed, when the Council of Australian Governments (COAG) amalgamated with a number of ministerial councils to optimise the coordination of policy making across related portfolios, and which reflected the government priorities at the time. Three previously existing councils were merged including: the Australian Education Council (AEC); the Council of Ministers of Vocational Education, Employment and Training (MOVEET); and the Youth Ministers Council (YMC). This new, and diversified council would be the governing body responsible for producing the *Adelaide Declaration* in 1999. Symes (1995, p. 260) argues that under processes of economic rationalism, Australian education underwent a dramatic shift away from concerns with social goods, to a primary focus on economic ends. Symes (1995) suggested that the extension of the responsibilities of the Department of Education to incorporate employment and training, and the dissolution of the Curriculum Development Council, signalled an ongoing transformation of Australian education systems to service the enhancement of national productivity, and the skills requirements of a changing economy.

The development of different authorities, curriculum bodies and programs continued on a state level across Australia during the 1990s. In Victoria, for example, in 1995 *The Curriculum and Standards Framework* (CSF) was developed and published by the Victorian Board of Studies (VBS). The CSF outlined what primary and secondary school students should know and be able to do across eight key areas of learning at regular intervals from preparatory level to Year 10. It consisted of sets of standards within a "framework on which they [schools] can build a curriculum tailored to meet the needs of individual students" (VBS, 1995, p. 1), in subject areas including: the Arts; English; Health and Physical Education; Languages Other Than English; Mathematics; Science; Studies of Society and the Environment; and Technology. The curriculum was republished later, in 2000, as CSF II by the Victorian Board of Studies, following the *Adelaide Declaration on National Goals for Schooling* (MCEETYA, 1999). This curriculum emphasised the importance of students undertaking vocational learning during the compulsory years, and that key learning areas should embed the development of generic skills, including key competencies and enterprise skills. The CSF II (2000, n.p.) states that "they [key competencies and enterprise skills] occur throughout the compulsory years and are integral to students developing the foundation for successful transition into the workplace and the broader community".

Mass standardised testing and competency policies and curriculum were met with some resistance in their early conceptions in Australia. Denise Meredyth (1998, p. 27) observes some public objection to the proposed inclusion and assessment of key competencies in curriculum at University, and at secondary school levels, and argues that some teachers were concerned with the roles played by business and industry bodies in these reforms. Meredyth (1998, p. 27) suggests that some teachers voiced objections to the imposition of mass standardised testing due to concerns that learning outcomes could become abstracted from personal development, learning experiences, and social context.

In the decade that followed the *Hobart Declaration*, and which led to the production of the *Adelaide Declaration* in 1999, ideas about the need for education and schooling to produce a flexible, multi-skilled workforce became more expansive. The declarations that followed also saw the production of the future and the twenty-first century as a technologically enhanced, globalised economy of knowledge and innovation.

The Adelaide Declaration on National Goals for Schooling in the Twenty-first Century (1999)

In 1996, Prime Minister John Howard and his Liberal-National conservative coalition government were elected to power at the Australian federal government level. By this time, the way policies had been "forged, implemented and evaluated" through government had changed significantly, and the influence of privatisation on education systems, had become so widely accepted that they had been "embraced by parties across the political spectrum, from right to left" (Ross & Gibson 2007, p. 2). Meredyth (1998, p. 21) stresses that the Howard government committed to providing a "business-led" system of vocational education and training, as it positioned the previous Labor government's national training programs as an intrusive, expensive, big-government intervention, and called for connections between industry, education and training to be informed by "rational choice, [and] personal interest". During this period, New Labour was in government in the UK (from the late 1990s until 2010), and Democrat Bill Clinton was president in the USA from 1993–2001 (although the Republicans held power in the House of Representatives and Senate during from 1995 until 2001). It has been suggested that both parties were less socially conservative than the Thatcher and Regan era; however, they were more inclined to think about market-led solutions to problems. This approach to policy, known as the "Third Way" focused on the development of centre-left social policy and centre-right economic policy (Lavelle, 2005).

In ways similar to the Labor government throughout the 80s and 90s, the Howard Coalition government argued for the need to focus on a national skills agenda in order to compete in globalising, technologised economies. Yet at the same time, the first Howard government federal budget (1996) was marked by the reduction of public funding for social services and job search services, with training schemes based on individual "user choice" established between trainees and employers (Meredyth, 1998, p. 21). Along with the then Minister for Employment Amanda Vanstone, and the later Minister for Employment, Education, Training and Youth Affairs David Kemp, the Howard government cut over $2 billion from university funding between 1996 and 1999, and introduced the option of full-fee paying places for domestic university students so that individuals could purchase their place in programs.

The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) met in April of 1999 and developed the *Adelaide Declaration on Educational Goals for Schooling in the Twenty-First Century*. Despite debates about the previous national declaration and its consequences for schools, teachers, and students, the *Adelaide Declaration* reproduced and expanded many of the legacies of that document. The *Adelaide Declaration* however, defined in more specific detail the characteristics of the future, the twenty-first century, and the perceived challenges that education, schooling, and young people would need to be prepared for. Jones (2008, p. 166) discusses the role of the MCEETYA in shaping education against the backdrop of the Howard government era:

> The new Commonwealth government was elected on a platform of a review of government services that would require a 'substantial and cultural change' with emphasis on uniformity and compliance and adoption of a new approach that would be 'outcome focused and input efficient' (NCA 1996). This approach also formed part of the Howard government's wider reform agenda of establishing national uniformity in education; including portability across jurisdictions, the introduction of national standards, increasing parental choice and increasing accountability to parents. The new agenda would have a significant impact on the workings of the ministerial council with the Commonwealth minister asking MCEETYA to undertake a review of its goals and structure.

The Adelaide Declaration (MCEETYA, 1999) frames the twenty-first century, the future, as a knowable and governable time–space, characterised by increasing technological change, competitive, global economies, and uncertain and changing worlds of work. According to the Preamble of the *Adelaide Declaration* (1999, p. 1) this world is, and will continue to be, characterised by:

> advances in information and communication technologies, population diversity arising from international mobility and migration, and complex environmental and social challenges. The achievement of the national goals for schooling will assist young people to contribute to Australia's social, cultural and economic development in local and global contexts. Their achievement will also assist young people to develop a disposition towards learning throughout their lives so that they can exercise their rights and responsibilities as citizens of Australia.

Up until the production of the *Adelaide Declaration*, the future had not been imagined in terms of these knowable, disaggregated and disassociated sets of challenges in discourses of education in Australia. As a consequence of these ways of imagining futures, the *Adelaide Declaration* (MCEETYA, 1999, p. 2) was able to argue for "investment in schooling to enable all young people to engage effectively with an increasingly complex world". This event in the production of particular futures, was important in giving authority to the proposed skills and competency focused solutions, introduced in the *Finn*, *Mayer* and *Carmichael* reports and the *Hobart Declaration*. The restructure and operations of the MCEETYA, and the production of the *Adelaide Declaration*, marks a significant event in the discipline and government of young people and futures at the federal and state level through the establishment of mechanisms such as "the setting of targets, the detailing of policy outputs and the achievement of key outcomes" (Jones, 2008, p. 166).

The *Adelaide Declaration* (1999, p. 4) also introduced a moral dimension to this way of governing the individual, as it defined what it is that young people "should have" in terms of "talents" and "capacities" when they leave school, and also in terms of the "curriculum" that

is able to develop these talents and capacities. The production of knowledge about the twenty-first century, the new millennium, and the subjects best able to navigate it, marked the evolution of discourses which imagined a more complex, challenging and uncertain world. The *Adelaide Declaration* departed from the *Hobart Declaration* of 1989 in the sense that it frames a future of uncertainty and change, and of increased flexibility as an inherently good thing in late 1990s Australian political and social life.

The challenges and changes of the future were, at the time of this event in 1999, and on the eve of the new millennium, imagined as falling within the remit and responsibility of education systems and institutions, young people and schooling (including teachers, parents and administrators). The future had come into focus, through neo-liberal problematisations, as a time–space that could be made known, and governed, in terms of its challenges and opportunities, through the development of young people's skills and competencies, behaviours, and dispositions. The *Adelaide Declaration* (1999, p. 1) includes the following goals for Australia's education systems on the brink of the new millennium.

> Schooling should develop fully the talents and capacities of all students. In particular, when students leave school, they should:
>
> 1.1 have the capacity for, and skills in, analysis and problem solving and the ability to communicate ideas and information, to plan and organise activities, and to collaborate with others.
>
> 1.2 have qualities of self-confidence, optimism, high self-esteem, and a commitment to personal excellence as a basis for their potential life roles as family, community and workforce members.
>
> 1.3 have the capacity to exercise judgement and responsibility in matters of morality, ethics and social justice, and the capacity to make sense of their world, to think about how things got to be the way they are, to make rational and informed decisions about their own lives, and to accept responsibility for their own actions.
>
> 1.4 be active and informed citizens with an understanding and appreciation of Australia's system of government and civic life.
>
> 1.5 have employment related skills and an understanding of the work environment, career options and pathways as a foundation for, and positive attitudes towards,

vocational education and training, further education, employment and life-long learning.

1.6 be confident, creative and productive users of new technologies, particularly information and communication technologies, and understand the impact of those technologies on society.

1.7 have an understanding of, and concern for, stewardship of the natural environment, and the knowledge and skills to contribute to ecologically sustainable development.

1.8 have the knowledge, skills and attitudes necessary to establish and maintain a healthy lifestyle, and for the creative and satisfying use of leisure time.

In terms of curriculum, students should have:

2.1 attained high standards of knowledge, skills and understanding through a comprehensive and balanced curriculum in the compulsory years of schooling encompassing the agreed eight key learning areas:

- the arts;
- English;
- health and physical education;
- languages other than English;
- mathematics;
- science;
- studies of society and environment; and
- technology

and the interrelationships between them.

2.2 attained the skills of numeracy and English literacy; such that, every student should be numerate, able to read, write, spell and communicate at an appropriate level.

2.3 participated in programs of vocational learning during the compulsory years and have had access to vocational education and training programs as part of their senior secondary studies.

2.4 participated in programs and activities which foster and develop enterprise skills, including those skills which will allow them maximum flexibility and adaptability in the future.

Schooling should be socially just, so that:

3.1 students' outcomes from schooling are free from the effects of negative forms of discrimination based on sex, language, culture and ethnicity, religion or disability; and of differences arising from students" socioeconomic background or geographic location.

3.2 the learning outcomes of educationally disadvantaged students improve and, over time, match those of other students.

> 3.3 Aboriginal and Torres Strait Islander students have equitable access to, and opportunities in, schooling so that their learning outcomes improve and, over time, match those of other students.
>
> 3.4 all students understand and acknowledge the value of Aboriginal and Torres Strait Islander cultures to Australian society and possess the knowledge, skills and understanding to contribute to, and benefit from, reconciliation between Indigenous and non-Indigenous Australians.
>
> 3.5 all students understand and acknowledge the value of cultural and linguistic diversity, and possess the knowledge, skills and understanding to contribute to, and benefit from, such diversity in the Australian community and internationally.
>
> 3.6 all students have access to the high quality education necessary to enable the completion of school education to Year 12 or its vocational equivalent and that provides clear and recognised pathways to employment and further education and training.

The *Adelaide Declaration* (1999, p. 1) states that when students leave school they should have capacities and qualities such as collaboration, "self-confidence, optimism, high self-esteem" and "a commitment to personal excellence as a basis for their potential life roles as family, community and workforce members". Importantly, goals 1.5 and 1.6 articulate the relationship between schooling and the workforce, and information and communication technologies. The *Adelaide Declaration* describes the need for schools to equip students with capacities, qualities, attitudes and skills of responsibility, self-awareness, optimism and active citizenship. These key words are introduced in the *Hobart Declaration*, but are expanded in much greater detail in the declaration of 1999, and in discourses of twenty-first century and enterprise skills throughout the FYA's *New Work Order* report series (2015–2019), the WEF's twenty-first century skills (2015) and the *Melbourne* (2008) and *Alice Springs (Mparntwe)* (2019) declarations.

In reference to curriculum development, the *Adelaide Declaration* introduced discourses of enterprise skills into conversations about young people, education and futures. In the state of Victoria, the *Adelaide Declaration* and related strategic documents, working groups and events, led to the establishment of the Victorian Curriculum and Assessment Authority

(VCAA) in 2001, with the *Curriculum Standards Framework* that had been active in Victoria since 1995, updated as *Curriculum Standards Framework II*. The Victorian Curriculum and Assessment Authority was established under the repealed Victorian Curriculum and Assessment Authority Act 2000 and continues to operate under the Education and Training Reform Act 2006 (the Act) (in 2022). These reforms enabled significant changes to curriculum to include the capacities outlined in the *Adelaide Declaration.* This education apparatus, as it was emerging at this time, was deploying mechanisms of training, examination and observation in relation to what young people should become in education, in relation to the needs of the labour market. As Foucault (1977b, p. 170) argues, discipline organises "the moving, confused, useless multitudes of bodies and forces into a multiplicity of individual elements". I do not intend to argue that the disciplinary relations in Australia's neo-liberal education apparatus are, inherently, bad or wrong, but to point out that what was emerging at this time was a whole suite of disciplinary knowledges and practices such as universal frameworks of the disaggregated student, the challenges of the future, and practices and mechanisms of definition and measurement.[22] These knowledge practices and relations enabled the production of more robust and authoritative links between the needs of labour markets in neo-liberal capitalism, the purposes of education, pedagogies and practices in schools, and the forms of self-governance mobilised through these discourses.

On a state political level in Victoria, from 1992 until 1999, Liberal (conservative) Premier Jeff Kennett led a majority government and took a number of actions to manage a reported $33 billion net public sector debt. The Kennett government privatised public transport, electricity, gas and water distribution and the Totaliser Agency Board (TAB), a state-owned

[22] These disciplinary practices and relations of power/knowledge/subjects are discussed in detail throughout Chapter Three.

gambling group, as well as commissioned capital works projects across the state of Victoria (Strangio, 2012). In 1999, the Steve Bracks-led Labor party defeated the Kennett government in the Victorian state election with a 13-seat swing to the Labor Party. It was thought that Bracks had almost no chance of winning the election at the time (Woodward & Costar, 2000). Previously, the Shadow Minister for Employment, Industrial Relations and Tourism, and Shadow Treasurer under John Brumby, Steve Bracks would-be Premier of Victoria from 1999 until 2007. During this time the Bracks government oversaw a number of structural changes to Victorian state education with a particular focus on raising Victoria's Year 12 retention rate, increasing investment in skills, and also a reduction of business regulation (Bracks, 2022, n.p.). Meanwhile, the conservative Liberal-National coalition government led by John Howard was in power at the Australian federal government level.

As a consequence of the *Adelaide Declaration* the Victorian Curriculum and Assessment Authority (VCAA) developed the *Victorian Essential Learning Standards* (VELS) in 2005. This curriculum reinforced ideas about, and created mechanisms for, monitoring and reporting on student development, and achievement to the state and federal level of government. Moving beyond the discipline-focus of previous curricula, the VELS was organised into three learning strands: discipline-based learning; interdisciplinary learning; and physical, personal and social learning. The VELS (2005, n.p.) also outlined its own "Educational Purposes, Principles and Values" including:

1. Sustainability – developing an understanding of the interaction between social, economic and environmental systems and how to manage them.

2. Innovation – developing the skills to solve new problems using a range of different approaches to create unique solutions.

3. Building strong communities – by building common purposes and promoting mutual responsibility and trust in a diverse socio-cultural community.

In 2006, Steve Bracks had won his third term as Premier of Victoria, a position he would hold until his resignation to John Brumby in 2007. Brumby was Premier of Victoria from 2007 until 2010. Meanwhile, John Howard held power as Prime Minister until his defeat by Labor leader Kevin Rudd in 2007. Throughout this time, the structural conditions for the development of a national *Australian Curriculum* were taking shape. Howard, for example, would call for a "root and branch renewal" of Australian history teaching, with the push for a national curriculum first proposed by Hawke and Keating in the late 1980s becoming a more likely reality at this time. In his 2006 Australia Day address to the National Press Club, John Howard stated that:

> how and what students are taught, and how government schools are administered […] are overwhelmingly state responsibilities, although the Commonwealth has a say in the National Curriculum, where a major repair job is required in history (and perhaps also the English) syllabus (Rodwell, 2017, n.p.).

Howard stated that "my fear is that if this curriculum remains unamended, young Australians of the future will be denied a proper knowledge of our nation's history" (2017, n.p.). This declaration, and the national curriculum that would emerge from it, would be redeveloped and implemented under Prime Minister Kevin Rudd and his Labor government after their landslide victory on 3 December 2007. The *Adelaide Declaration* had bought an imagined future of the economy, environment and society into the problematisation of young people, schooling, education and work across states and territories. The *Adelaide Declaration* built on the legacy of the *Hobart Declaration*, which amplified the school–work nexus, and brought skills and capabilities discourses into these conversations, along with more complex disciplinary knowledge practices and rationalities of government. The *Adelaide Declaration* was an event which broke down and defined a particular kind of future to come in the twenty-first century, and the kind of skilled young person who was imagined as being capable of thriving in/for that future.

The Melbourne Declaration on Educational Goals for Young Australians (2008)

Almost 20 years after the first national declaration and goals for schooling were agreed in the *Hobart Declaration* (1989), in April 2008, federal and state ministers met, and requested that the National Goals for Schooling Working Group be established to develop a new national declaration. Much was happening during the time that *Melbourne Declaration* (MCEETYA) was produced, including the Global Financial Crisis (GFC) which, from mid-2007 until early 2009, saw extreme global economic volatility. Sparked by the US housing market crash, "excessive risk taking", "increased borrowing by banks" and "regulation and policy errors", the GFC saw many economies experience their deepest recession since the 1930s (RBA, 2022, pp. 2–3). It is often reported that Australia did not experience significant financial downturn during the GFC, due to Australian banks' exposure to US housing markets, higher lending standards, and large resource exports to China whose economy rebounded (2022, p. 4). However, in the downstream of this crisis, as Luke Howie and Perri Campbell (2016) have suggested, the GFC halted a decade of declining youth unemployment, because many young people were "confronted with ambiguous futures and fewer options for employment or a career" (Howie & Campbell, 2016, p. 906), and faced a reality that their futures would not look like that of their parents' generation. In the lead-up to the event of the *Melbourne Declaration*, there were a number of other significant events. By 2007, Kevin Rudd had been elected as Prime Minister to lead a Labor Government, and during the first years in government, issued National Apologies to the Stolen Generations and the Forgotten Generations.[23] On 7 February 2009 the Black Saturday bushfires killed 173 people and injured 414. In addition, over one million animals were killed, and 450,000 hectares of land were burnt (NMA, n.p.). Against this backdrop and foreshadowing some of these events, the

[23] See, https://www.nma.gov.au/defining-moments/resources/national-apology

Melbourne Declaration (2008) framed the changes and challenges of the future, and the capabilities, creativity, confidence and critical thinking that education ministers, stakeholders and related agencies imagined young people would need to develop.

The *Melbourne Declaration* followed from the *Federalist Paper 2: The Future of Schooling Australia report* produced by the Council for the Australian Federation (CAF, 2007), which included a review of the *Adelaide Declaration* that outlined a "statement on the future of schooling in Australia" by the states and territories which included eight proposed areas of work. Peter Dawkins was Chair of this Review Steering Committee, and Secretary of the Department of Education at the time. In reviewing the *Adelaide Declaration*, the committee addressed the following questions in *Federalist Paper 2* (CAF, 2007, p. 5):

1. What have been the achievements of cooperative federalism in the area of school policy since the Adelaide Declaration?
2. How do Australian schools perform by international standards?
3. Is the time ripe for a new statement on the future of schooling in Australia and, if so, what should it include?
4. In the light of a new statement, what actions should the States and Territories take, collaboratively, to further promote high-quality schooling across Australia?

The eight areas of work that emerged from the report included (CAF, 2007, pp. 31–35):

1. Working towards national curricula
2. Testing to improve student achievement
3. Reporting on performance
4. Supporting workforce reform
5. Harmonising teacher registration
6. Reducing red tape

7. Convening a biennial national forum

8. A MCEETYA process for agreeing a new declaration on the future of schooling in Australia, between State, Territory and Commonwealth governments and all school sectors.

The *Federalist Paper 2* states that after eight years, it was time to "reassert the importance of national collaboration to promote high-quality schooling for all Australian students, whatever jurisdiction, school system or individual school is involved" (CAF, 2007, p. 6). The *Federalist Paper 2* championed the work over the previous 20 years since the *Hobart Declaration* and argued for increased data driven accountability in relation to student results in the National Assessment Program – Literacy and Numeracy (NAPLAN) testing, the production of an annual National Report of Schooling, and for participation in the OECD's PISA testing and Trends in International Mathematics and Science Study (CAF, 2007, p. 8).

The *Melbourne Declaration* (2008, p. 7) states that:

> Improving educational outcomes for all young Australians is central to the nation's social and economic prosperity and will position young people to live fulfilling, productive and responsible lives. Young Australians are therefore placed at the centre of the Melbourne Declaration on Educational Goals.

The Melbourne Declaration (MCEETYA, 2008, pp. 7–8) established two goals:

> Goal 1: Australian schooling promotes equity and excellence
>
> Goal 2: All young Australians become:
>
> - successful learners
> - confident and creative individuals
> - active and informed citizens.

The *Melbourne Declaration* (2008) defines what it means to be a successful learner, a confident and creative individual and an active informed citizen, in terms of a series of skills,

actions, orientations, dispositions, abilities, character traits, morals and values for each forms of "becoming". These definitions include significant detail, and include (MCEETYA, 2008, pp. 8–9):

- successful learners
    - develop their capacity to learn and play an active role in their own learning
    - have the essential skills in literacy and numeracy and are creative and productive users of technology, especially ICT, as a foundation for success in all learning areas
    - are able to think deeply and logically, and obtain and evaluate evidence in a disciplined way as the result of studying fundamental disciplines
    - are creative, innovative and resourceful, and are able to solve problems in ways that draw upon a range of learning areas and disciplines
    - are able to plan activities independently, collaborate, work in teams and communicate ideas
    - are able to make sense of their world and think about how things have become the way they are
    - are on a pathway towards continued success in further education, training or employment, and acquire the skills to make informed learning and employment decisions throughout their lives
    - are motivated to reach their full potential
- confident and creative individuals
    - have a sense of self-worth, self-awareness and personal identity that enables them to manage their emotional, mental, spiritual and physical wellbeing
    - have a sense of optimism about their lives and the future
    - are enterprising, show initiative and use their creative abilities

- develop personal values and attributes such as honesty, resilience, empathy and respect for others

- have the knowledge, skills, understanding and values to establish and maintain healthy, satisfying lives

- have the confidence and capability to pursue university or post-secondary vocational qualifications leading to rewarding and productive employment

- relate well to others and form and maintain healthy relationships

- are well prepared for their potential life roles as family, community and workforce members

- embrace opportunities, make rational and informed decisions about their own lives and accept responsibility for their own actions

• active and informed citizens

  - act with moral and ethical integrity

  - appreciate Australia's social, cultural, linguistic and religious diversity, and have an understanding of Australia's system of government, history and culture

  - understand and acknowledge the value of Indigenous cultures and possess the knowledge, skills and understanding to contribute to, and benefit from, reconciliation between Indigenous and non-Indigenous Australians

  - are committed to national values of democracy, equity and justice, and participate in Australia's civic life

  - are able to relate to and communicate across cultures, especially the cultures and countries of Asia

  - work for the common good, in particular sustaining and improving natural and social environments

  - are responsible global and local citizens

The vision of the *Melbourne Declaration* built on from the *Adelaide Declaration* in a number of ways. The *Adelaide Declaration* (1999, p. 1) states that "Australia's future depends upon each citizen having the necessary knowledge, understanding, skills and values for a productive and rewarding life in an educated open and just society". In terms of imagining young people's futures, the *Melbourne Declaration* also declares that a vast number of global, competing pressures, particularly "climate change", the increase of international mobility and migration, and global relations with Asia would present major challenges and changes. The *Melbourne Declaration* (2008, pp. 4–5) also emphasises how "Australia's capacity to provide a high quality of life for all will depend on the ability to compete in the global economy on knowledge and innovation". The *Melbourne Declaration* signalled a renewed emphasis on the possibility of a high quality of life would fall on the individual's (and their networks) ability to become successful learners, confident and creative individuals, and active and informed citizens, in order to compete in a global economy of knowledge and innovation.

At the same time, the *Melbourne Declaration* had turned its focus from schooling and education, to "Young Australians" and "Young People", and the ability of the individual subject to thrive amidst these, and emerging uncertainties. Kelly (2006) describes the tensions to be found where there is a governmental, moral obligation to become responsible and enterprising against a backdrop of a global financial crisis and institutional failings causing youth unemployment. The problem of young people's entrepreneurial selfhood in relation to these challenges, had also emerged in publications by non-government organisations such as the Foundation for Young Australians (FYA) in their *New Work Order* series of reports, in the years that followed the *Melbourne Declaration*.

Along with the *Melbourne Declaration*, the *MCEETYA four-year plan 2009 – 2012: A companion document for the Melbourne Declaration on Educational Goals for Young Australians* was published. And in July 2009, the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) was established following agreement of the Council of Australian Governments (COAG) to realign the roles and responsibilities of two previously existing councils: MCEETYA and the Ministerial Council for Vocational and Technical Education (MCVTE). The Ministerial Council for Tertiary Education and Employment (MCTEE) was also established.

As reflected in *Federalist Paper 2: The Future of Schooling Australia report* (CAF, 2007) which informed the production of the *Melbourne Declaration*, the restructuring of the MCEETYA and the initial establishment of the council by COAG in 1993, can be described as a key change made in the name of cooperative federalism. The character of this event is revisited in detail in the discussion section of this chapter. Where cooperative federalism is concerned with the distribution of political power between federal (Commonwealth) and state governments in Australia, the amalgamation and formation of the new councils such as MCEETYA and later MCEEDYA signal structures which enabled the Commonwealth and state governments to implement particular ways of knowing and governing that were developing across many OECD economies at the time. The series of declarations produced by these councils, in this context, can be understood as a key mechanism in assembling the multiple states, territories and agencies as a cooperative "federation". As Jones (2008, p. 164) states:

> While there has been a degree of optimism about the benefits that ministerial councils could provide in improving policy coordination, some commentators have questioned their place in a democratic system. Painter's view has been that they are 'shadowy bodies operating almost entirely by unwritten working rules and general understandings'.

Jones (2008, p. 164) also raised concern over the relations between these councils and "political accountability" and suggests that "ministerial councils 'blur' accountability that comes from openness to public and parliamentary scrutiny". Jones (2008, p. 171) argues that while the responsibility for education policy in Australia belongs to the states, "the Commonwealth has been able to use its fiscal and constitutional superiority to implement its own agenda". Such governance structures have meant, Jones (2008, p. 171) states:

> The performance of MCEETYA over the last decade has suited the Commonwealth purposes well. State ministers have been unable, and often unwilling, to rally sufficient resistance amongst themselves to withstand the Commonwealth pressure to conform. Protecting their own interests has been the state priority, ahead of a shared desire to negate Commonwealth aims; it has also encouraged blame shifting and given strength to the Commonwealth's push for a national approach.

It is important to note here the connections between the Victorian State Government, the Australian Federal Government, the Commonwealth, and a wider network of neo-liberal economies across OECD nations who are interconnected and share many common frameworks and policies. The reconstruction of federal government councils are important examples of the ways in which the relations between school, education and young people, were being reformed in Australia's neo-liberal education apparatus. Importantly, these councils also enabled the reproduction of discourses of young people, education, skills and futures, found in global education policies such as the UK, Scotland and the USA. While "cooperative federalism" might suggest that these changes to ministerial councils and national curriculum and declarations were only about centralising state governance of education, the apparatus that I am identifying suggests that the complex network of organisations and actors in reproducing these discourses is much more globally dispersed. Nonetheless, these restructures were significant in establishing new forms of accountability, reporting and performance measurement for young people and schools.

The *Melbourne Declaration* emerged along with a *National Education Agreement* (2008), a *Council of Australian Governments Reform Fund Act* (2008), and the *Federal Financial Relations Act 2009*. Global networks of policy makers, think tanks, non-government organisations, governments and businesses had, by 2008, become increasingly significant stakeholders in defining the purposes and operations of Australian education institutions.

The *Melbourne Declaration* framed the twenty-first century as an increasingly complex time–space of problems, challenges, pressures and changes. It emerged alongside economic reforms that called for innovation, creativity and competitiveness on a global level. The futures described in the *Melbourne Declaration* flow through and from the global, through mechanisms such as the OECD's Programme for International Student Assessment (PISA), and via the *Future of Schooling Australia* report (CAF, 2007). Governing bodies such as the OECD's PISA (discussed in Part Two) assessment and reporting, as well as the National Assessment Program – Literacy and Numeracy (NAPLAN), and My School (ACARA, 2020b) websites, had also developed during this time, as mechanisms of accountability in and across schools and education systems according to the curriculum and assessment technologies that flowed from the *Melbourne Declaration.* What had emerged in relation to this event in 2008 was an increased focus on establishing reporting and accountability mechanisms between young people's educational achievement and skills and schools, so that they could be governed more effectively in relation to the needs of changing labour markets.

Changes made in the name of cooperative federalism, enabled the further restructuring of government ministerial councils, which would continue to be key agencies in the production of national curriculum, national declarations, and the government of education from a federal

level.[24] Many of the keywords across the *Hobart*, *Adelaide* and *Melbourne* declarations are relatively similar, and share a focus on the development of an active, autonomous, individually responsible young person who faces a future that is made knowable as challenging, changing and uncertain, globalised, technologised and precarious. These discourses enable the production and reproduction of the responsible, self-governing individual as the central locus of action in a techno-centric future. In much of what follows, I will suggest that these ways of knowing and governing strategically subjugate local knowledges about young people's unequal experiences of, access to, and engagement with education and schooling, employment, and the impacts of the climate crisis, unemployment, marginalisation and disadvantage in different places and communities across Australia.

The Alice Springs (Mparntwe) Education Declaration (2019)

From 2007 until 2010 Kevin Rudd was Prime Minster of Australia, leading a Labor government until a leadership spill during June 2010 when Julia Gillard challenged Rudd for leadership of the party. Gillard became the first female prime minister of Australia and held the position until 2013. Kevin Rudd returned to power for a very brief time leading up to the 2013 election when Tony Abbott led a conservative Liberal-National coalition to government. Abbott remained Prime Minister until 2015, when in another leadership spill,

[24] While not directly related to skills discourse or goals for education and young people, the Gonski Review, formally titled *Review of Funding for Schooling* (Australian Government, 2011), is another contested and debated mechanism which enabled cooperative federalism to function through the management of school funding. The *Gonski Review* (Australian Government, 2011) and *Gonski 2.0*, formally titled *Through Growth to Achievement Report of the Review to Achieve Educational Excellence in Australian Schools* (Australian Government, 2018a), are not central to my purposes here. However, these reports signal debates about changes to funding models to create a more equitable school funding system, and "to ensure that differences in educational outcomes are not the result of differences in wealth, income, power or possessions" (Australian Government, 2011, p. x). There has been significant work which has explored the insights, limitations, and the knowledge practices which structure the "Gonski Report". Notably, Jane Kenway (2013, pp. 304–305) who argues that these reports highlight "the manner in which social advantage and disadvantage and educational success and failure are linked in Australia's schooling system". While Kenway (2013, p. 306) suggests that many of Gonski's recommendations are "timid" in the face of "dire" problems, the report is limited by its focus on "sectors and rungs" rather than the systemic causes of disadvantage, and "has the drawback of attracting attention away from some subtle but significant relationships that exist within and across sectors".

fellow Liberal MP Malcom Turnbull took power until 2018. He was later succeeded by Prime Minister Scott Morrison. In the lead up to the production of the *Alice Springs (Mparntwe) Declaration* by the Education Council (EC) in 2019, there were a number of key social, cultural, political and environmental events at the national level. Some of these events include the production of the *Uluru Statement from the Heart* (2017) and the legalisation of same-sex marriage (December 2017). Also, in the summer of 2019–2020, bushfires destroyed 14.3 million hectares of land, 3000 buildings and killed 34 people. It was reported that three billion animals were killed or displaced during the Black Summer bushfires (Slezak, 2020). The COVID-19 pandemic also emerged and dramatically impacted the health, wellbeing, livelihoods, education and work of individuals and communities, globally and in Australia into 2020 and 2021. The *Alice Springs (Mparntwe) Declaration* was produced against a backdrop of social, cultural, political and environmental crisis, changes and events, some of which are made present in the declaration, however some had been discontinued and made absent in the production of this declaration.

Building on the work of the *Melbourne Declaration* (2008) and against this social, cultural, economic, political and environmental backdrop, the *Alice Springs (Mparntwe) Declaration* (2019) reproduced particular ideas about young people, education and uncertain futures.

In the years following the *Melbourne Declaration*, and the National Education Agreement (2008), the Council of Australian Governments (COAG), the *Reform Fund Act 2008*, the *Federal Financial Relations Act 2009* and a variety of other reforms, the Australian Curriculum Assessment and Reporting Authority (ACARA) had been developing the Australian National Curriculum. From 2014, the Australian national curriculum was implemented across states and territories, which included the new "General Capabilities" (ACARA, 2022a). The general capabilities (ACARA, 2022a, n.p.) include:

- Literacy
- Numeracy
- Information and Communication Technology (ICT) Capability
- Critical and Creative Thinking
- Personal and Social Capability
- Ethical Understanding
- Intercultural Understanding.

These capabilities, according to ACARA (2022a, n.p.), "play a significant role in the Australian Curriculum in equipping young Australians to live and work successfully in the twenty-first century" and include "knowledge, skills, behaviours and dispositions" for "complex and changing circumstances, in their learning at school and in their lives outside school".

By 2019, the *Alice Springs (Mparntwe) Declaration* (2019) was produced. *Mparntwe* is the name that the peoples of Eastern Arrernte have for the unceded land of Alice Springs. Like the declarations of the past 30 years, the *Alice Springs (Mparntwe) Declaration* (EC, 2019, p. 2) called for the expansion of education systems to "prepare young people to thrive in a time of rapid social and technological change, and complex environmental, social and economic challenges". The *Alice Springs (Mparntwe) Declaration* (EC, 2019, p. 4) includes "two distinct but interconnected goals" which are almost identical to the goals produced in the *Melbourne Declaration* (2008):

> It is critical for the education community to work in partnership with parents, carers and families to support a child's progress through early learning and school.
>
> Goal 1: The Australian education system promotes excellence and equity

> Goal 2: All young Australians become:
>
> - confident and creative individuals
> - successful lifelong learners
> - active and informed members of the community.
>
> Achieving these education goals is the responsibility of Australian governments and the education community in partnership with young Australians, their families and carers and the broader community.

The *Alice Springs (Mparntwe) Declaration* frames young people in very similar ways to that of the *Melbourne Declaration*, however, there are significant silences in the Preamble to the declaration that are of interest. Where the *Melbourne Declaration* defined a range of global, competing pressures, including climate change, the increase of international mobility and migration, and global relations with Asia, The *Alice Springs (Mparntwe) Declaration* signalled the discontinuation of these challenges from the national declaration on education and young people. The removal of environmental concerns from the definition of the twenty-first century and the future, speak to the political and economic landscape that was emerging at this time, and in particular the Liberal coalition government who failed to make sufficient commitments, and meet targets related to the reduction of carbon emissions to below 2005 levels before 2030 (see *The Paris Agreement*, UNFCCC, 2016). This discontinuity is revisited in Chapter Six of this thesis.

The *Alice Springs (Mparntwe) Declaration* (Education Council, 2019, p. 2) states that change is characterised by technological advancement, improved citizenship, and preparation for new labour markets. The *Alice Springs (Mparntwe) Declaration* echoes the discourses of reconstruction that were emerging in the late 1980s and early 90s through the ACTU's mission and reports, the development of the Labour Accords, *Finn*, *Mayer* and *Carmichael* reports and the event of the *Hobart* and *Adelaide* declarations. The *Alice Springs (Mparntwe)*

Declaration (2019, p. 3) states that it is the shared responsibility of individuals and their networks of parents, carers and families to navigate these changes, and futures. Drawing on the significance of *networks* to the governance of education and schooling articulated in the *Melbourne Declaration*, the *Alice Springs (Mparntwe) Declaration* (2019, p. 9) stated the importance of "partnerships" to the development of young Australians:

> It is critical for the education community to work in partnership with parents, carers and families to support a child's progress through early learning and school. Partnerships create opportunities for young Australians to connect with their communities, business and industry and support the development and wellbeing of young people and their families. These connections and associations can facilitate development, training and employment opportunities, promote a sense of responsible citizenship and encourage lifelong learning.

Ideas about the distribution of responsibilities across schools, communities, businesses and industry, find expression through discourses of partnerships in the *Alice Springs (Mparntwe) Declaration.* "Developing stronger partnerships" is a key area of focus in the *Alice Springs (Mpartnwe) Declaration* (Education Council, 2019, p. 10) and suggests:

> Australian governments commit to building partnerships that support learners' progress through the education system, and to provide them with individualised, high quality learning opportunities and experiences, and personal development. Further, Australian governments commit to fostering these partnerships to support young Australians as they continue their learning throughout their lifetime.

Partnerships in this sense, can be understood to emerge from the kind of network discourses that had been emerging, though disrupted and debated at various times, alongside the capability, competency, skills, innovation and enterprise discourses over the previous five decades. Michael Peters, in his article, "From State responsibility for education and welfare to self-responsibilisation in the market" in a Special Issue of *Discourse* (Peters, 2017, p. 144) highlights his concern with the logic of partnerships in neo-liberal problematisations of liberal welfare government. Peters (2017, p. 144) argues that "neoliberals have reinvented subjectivity and the market in moral terms", enabling:

> a shrinking state and a kind of parallel privatisation that, increasingly, sees the likes of Serco and other private sector companies taking over the responsibility for running what used to be public institutions. The logic of public–private partnerships drives this strategy more deeply into the social fabric.

The *Alice Springs (Mpartnwe) Declaration* also includes discourses of partnerships, in terms of establishing networks which are able to support individual navigation of the labour market among students, parents, teachers and schools, and the responsibilities of schools to develop partnerships with communities and businesses.

The period spanning the event of *Hobart* in 1989, to the *Alice Springs (Mparntwe) Declaration* in 2019, can be understood as an epoch in the neo-liberal problematisation of liberal welfare government, which has seen the production, reproduction and circulation of discourses shaping more robust relationships between young people, education and schooling, to align with the logics and trajectories of re-regulation in a neo-liberal capitalist economy. During this neo-liberal epoch, young people, schooling, education and training systems have been problematised in relation to discourses of reconstruction, flexibility, cooperative federalism, economic rationalism, partnerships, pathways, skills, and the changes and challenges of twenty-first century. In order that these discourses can function and gain authority in Australia's neo-liberal education apparatus, forms of sovereign power, discipline and government play a key role. Parts Two and Three of this thesis focus specifically on the relations of power/knowledge/subjects which give shape to discourses of what young people should be and become (Part Two) and/in/for uncertain futures of work and the planet (Part Three).

The decennial "series" of key events (the declarations), the "reconstruction" of Australian federal and state government structures, policies, ministerial councils (such as the MCEETYA), and the production of accountability and reporting mechanisms of schools,

teachers, and discourses of young people's skills, are all significant elements in the ensemble which comprises Australia's neo-liberal education apparatus. However, this apparatus does not have a linear, continuous, uninterrupted history. There are various knowledges subjugated in the development of this apparatus, and in what follows I identify some of them, and provide an account of the general character of this ensemble.

The Aims and Needs of Australia's Neo-Liberal Education Apparatus

The series of declarations discussed in this chapter, signal the interests and interventions shared among a large ensemble of agencies, organisations, government and non-government bodies. Nikolas Rose and Peter Miller's (1992) work, and their engagement with Foucault's genealogies, provides a way of framing the discussion in this final section.[25] There are many elements that reproduce and circulate the discourses and practices discussed in this chapter, which are absent in these discussions about education at the Australian federal and state level of governance. It is important to highlight that discourses of twenty-first century education and skills, enterprise and aspiration, young people, and uncertain futures, are entangled with discourses of youth unemployment, future labour markets and policies, and global networks including, for example, Swedish education and training systems, ACTU members, union figures, teachers, curriculum reforms, academic knowledge, reporting mechanisms, curricula, federal politicians and ministers and councils. These four national declarations have also been produced against a backdrop of significant global and national, social, economic, political and environmental changes and crisis, whose impacts are made present, and absent at different times in these discourses about what young people should become and what the

[25] Much of this work is also captured in a collection by Miller and Rose (2008) titled *Governing the Present: Administering Economic, Social and Personal Life*. Miller and Rose's collection engages with the frameworks, concepts and ethos that they had developed and engaged with in governmentality studies and genealogical research since the 1990s. While their publication from 1992 is used to frame this section, other work from this collection has informed my understanding of the themes and elements in discussion.

future holds. In this sense, the neo-liberal education apparatus that I am describing and analysing here, is "the network that is established between these elements", and this network performs the "concrete strategic function" of imagining young people, education and the future as problems of government in a neo-liberal version of capitalism (Agamben, 2009, p. 14).

These declarations provide a series of examples through which I can describe the general character of this education apparatus. Nikolas Rose and Peter Miller's paper "Political power beyond the State: problematics of government" for *British Journal of Sociology* (1992), provides a way of understanding these events within a wider epoch in the neo-liberal problematisation of liberal welfare government. For Rose and Miller (1992, p. 174), "oppositions between state and civil society, public and private, government and market, coercion and consent, sovereignty and autonomy and the like, does not adequately characterise the diverse ways in which rule is exercised in advanced liberal democracies". Instead, Rose and Miller (1992, p. 174) argue that it is more productive to view political power as being exercised "through a profusion of shifting alliances between diverse authorities in projects to govern a multitude of facets of economic activity, social life and individual conduct". At first glance, the national declarations discussed in this chapter might assume the strategic alignment of the behaviours, routines and practices of the individual student, teacher and school with the desires of the state. However, as I have signalled throughout this chapter, there is a much wider rationality of government at play here, which brings together much more diverse and dispersed elements so as to direct education toward particular aims and needs. A wide network of Commonwealth and state agencies, Australian federal, state and territory governments, NGO's, global thinktanks and policy makers (such as the OECD and the WEF), both private and public agencies, businesses, labour markets, and political and union figures, have all played significant roles in shaping the evolving

characterisations of the purposes and goals of education in a way which aims to create more robust links between young people's behaviours and a future conceived through market logics of competition, individualism and profit. Discourses of "reconstruction" and "cooperative federalism" became key features in enabling these relations. In addition, mechanisms such as mass standardised testing through global organisations such as PISA, and NAPLAN and My School (ACARA, 2020b) in Australia, and events in reforms to ministerial councils, national curriculum, and new forms of performance measurement have played a part in the reproduction of the relations between the elements of this apparatus.

Importantly, in terms of the forms of power at work in this apparatus, these discourses enable both a material, temporal and metaphorical distance in the government of young people, education and futures in this socio-economic context. Where discourses of reconstruction, deregulation, flexibility and choice appear to visit more freedom and opportunity on young people, teachers and schools, I argue that within a neo-liberal education apparatus in Australia, skills and competency discourses indicate new forms of regulation and responsibility. As Rose and Miller (1992, p. 174) indicate:

> Power is not so much a matter of imposing constraints upon citizens as of 'making up' citizens capable of bearing a kind of regulated freedom. Personal autonomy is not the antithesis of political power, but a key term in its exercise, the more so because most individuals are not merely the subjects of power but play a part in its operations.

It is in this sense, discourses of twenty-first century skills and narratives of a flexible, globalised, uncertain future can be understood as seeking to produce a particular kind of docility-utility and responsible self-governance in contemporary educations systems, in order to meet the needs of contemporary labour markets. Instead of overvaluing "the problem of the State", which Foucault understood as a "mythical abstraction", I want to acknowledge that over the past five decades, there have been novel processes at work in the neo-liberal

"governmentalisation of the State" (Rose & Miller, 1992, pp. 174–175). Through these changes, Rose and Miller (1992, p. 175) argue:

> the associations formed between entities constituted as 'political' and the projects, plans and practices of those authorities – economic, legal, spiritual, medical, technical – who endeavour to administer the lives of others in the light of conceptions of what is good, healthy, normal, virtuous, efficient or profitable.

Therefore, it is important to produce knowledge about the dispersed elements in this apparatus who are producing and reproducing these knowledges of what is "good, healthy, normal, virtuous, efficient or profitable" (Rose & Miller, 1992, p. 175). Rose and Miller (1992, p. 175) argue that knowledge production is "central to these activities of government and to the very formation of its objects, for government is a domain of cognition, calculation, experimentation and evaluation". In Australia's neo-liberal education apparatus, government does not "weave an all-pervasive web of 'social control'", but instead, functions through "multiple and delicate networks that connect the lives of individuals, groups and organisations to the aspirations of authorities in the advanced liberal democracies of the present" (Rose & Miller, 1992, pp. 175–176). An education apparatus is also a key element in a whole ensemble of apparatuses which connect the lives of individuals with the aims and needs of neo-liberal governmentalities. The kinds of knowledges which circulate through the elements of this apparatus are important because they make it possible to exercise legitimate and calculated forms of power and imagine young people as a problem that needs fixing.

In this epoch, education cannot be adequately understood as a form of state control or coercion, but as an always shifting, complex and dispersed apparatus which draws on sovereign-disciplinary-governmental relations of power/knowledge/subjects. In Australia's neo-liberal education apparatus, structural changes in industry and the labour markets have come to dominate conversations about the supply and demand of human capital that

education systems should produce. Knowledge of the structural conditions that shape youth unemployment in different places and for different populations of young people, the consequences of labour market deregulation, and resistance to national goals for schooling and mass standardised testing are absent in the declarations that followed *Australia Reconstructed* and the *Hobart Declaration*. Instead, more robust links were developed between globalised neo-liberal governmentalities and federal and state councils of government during the final decades of the twentieth century. The circulation and reproduction of these discourses provide clues about the "loose assemblage of agents, calculations, techniques, images and commodities" in which "individuals can be governed through their freedom to choose" (Rose & Miller, 1992, p. 201). The sequential, decennial series of events discussed in this chapter have become a significant mechanism in shaping the discourses, practices and materiality of education, young people and futures in Australia.

Contemporary governmental ambitions for young people and their futures, which may appear as national priorities and declarations emerge through historically contingent tactics of management, incitement, and a "complex of mundane programs, calculations, techniques, apparatuses, documents and procedures" which require the "intricate interdependencies between political rationalities and governmental technologies" (Rose & Miller, 1992, p. 175–176). The shift toward national curriculum, mass standardised testing, and the production of robust links between education and work, should not be understood as a problem of state rule in Australia, but as processes in the neo-liberal governmentalisation of the state to align with the logics of neo-liberal capitalism over the past five decades.

Within Australia's neo-liberal education apparatus there are relationships and tensions between individuals, organisations, local, national and global priorities for education. The subjects of this apparatus, and the futures that they are imagined as needing to manage, are

produced through strategic relationships. These are not state centred or top-down relations of power but instead, these discourses visit and install "calculative technologies" so that the individual "enjoins those within these locales to work out 'where they are', calibrate themselves in relation to 'where they should be' and devise ways of getting from one state to another" (Rose & Miller, 1992, p. 187).

The active, choice-making, responsible forms of selfhood, mobilised through discourses of twenty-first century skills, enterprise, aspiration, flexibility, and uncertain futures, have "come to predominate over almost any other in evaluations of the ethical claims of political power and programmes of government" (Rose & Miller, 1992, p. 200). The consequence of this is that the "subject is less a social citizen with powers and obligations deriving from membership of a collective body, than an individual whose citizenship is active" (Rose & Miller, 1992, p. 201). In the chapters that follow, I develop a genealogical analysis of the technologies and relations, discourses and agencies, aims and needs which comprise this neo-liberal education apparatus in Australia. I explore the ways in which young people are known, governed and educated as needing to be and become enterprising and aspirational in/for uncertain futures related to the Fourth Industrial Revolution and Sustainable Development.

Interlude – Ash's Story

Ash's story was also first published in a paper titled COVID-19 and young people's "'Future Presents': lockdown stories from the Anthropocene", published in the *Journal of Youth Studies* (Kelly, Brown & Goring, 2022a).

As I have already indicated in introducing Rosie's story, our intent in that paper was to situate the pandemic, the social, cultural, economic and political responses to the pandemic, and the challenges and opportunities that this public health crisis produces for young people's health and wellbeing, their education, training and employment pathways, and their sense of belonging, connectedness, even community, in the broader, unfolding crises of global capitalism, of earth systems, and of bio-diversity that is heralded by the Anthropocene (Haraway, 2016).

In developing that argument, we drew on some of the outcomes of a place-based scenario planning project in Melbourne's (Australia) inner northern suburbs that was undertaken in the last half of 2020. The project, titled "COVID-19 Recovery Scenarios for Young People in Melbourne's Inner North", was a collaboration with the Inner Northern Local Learning Employment Network (INLLEN) and its Inner North Youth Employment Taskforce (INYET). As part of that project, we used a video-capture platform (Video Ask) to conduct video interviews with 53 young people during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections during August–November 2020. The project was shaped by a scenario planning methodology and had a future orientation to the year 2025. In that paper we presented the stories of three young people from the midst of Melbourne's second lockdown. In that context, we suggested that these stories were meant to be illustrative and inclusive – but not representative – of some of the concerns, anxieties, uncertainties, and hopes that young people in Melbourne's inner

north gave voice to when we provided them with an opportunity to reflect on and respond to questions about their presents and futures.

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Ash, who was 24 and from the Darebin LGA, identified as gender fluid, and used the pronouns "they" and "them". The central feature of Ash's story related to their history of mental illness, its impacts on life during the COVID-19 pandemic, and on their anxieties, fears, hopes and aspirations about the future. Ash was very open and reflective about dealing with depression and anxiety for the last 12 years. At the same time they were often wryly humorous in these reflections, and tried to deflect or downplay the nature of their struggles:

> I have really only broken that quarantine twice the entire time since then. So I have barely left my house since quarantine started which has not been good for both my mental and physical health, but everyone struggles, so we're doing okay.

The lockdown meant that Ash lost contact with their doctors and their support group, and because of their anxiety they did not follow up with phone appointments:

> And so the challenge for me is to adjust to going back after being isolated. I've sort of accustomed myself to the way of living being inside and not having to deal with people. Now having to go back and sort of re-acclimatise to having social interactions and things […] that could be a bit of a challenge with the mental health issues.

Ash's struggle with long-term mental health issues has meant that they also struggled with meeting any education and training commitments at this time in their lives. They were also unemployed when they spoke with us, and in a fairly precarious financial situation. Ash explained that they only received financial support from Centrelink and through youth allowance, but the support was barely adequate to meet the costs of living independently:

> I don't have any financial backing from my family and so at the moment without a job, my only financial support has been from the government, with Centrelink. When I was on youth allowance that money was not really sufficient to be able to live on.

> When you're living in a place like Melbourne where rent is so expensive […] over half my money was going to just pay my rent.

Ash completed a Diploma of Screen Media in Special Effects and Makeup at the end of 2019 and had been searching for a job in the arts or entertainment industry. Since the lockdown and consequent "shut down" of that industry, they had begun to develop an aspiration to explore a career in counselling or psychology:

> I think I could see myself doing that as a career because I love helping people and trying to use my experiences in life, even though I'm only 24. Being part of the LGBT community and having struggled with mental health issues, it really gives me a diverse understanding of what sort of experiences that people can go through in life. I feel like that could benefit me with pursuing a career in counselling or psychology

These hopes were also another way of expressing the concerns that Ash spoke to in terms of the challenges they identified for gender diversity, racism, other forms of discrimination, and the climate crisis. And what Ash thought was being done, or not done, in relation to these crises.

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I first connected with Ash through a local youth unemployment service provider, at an online Zoom meeting during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections. The session included a small group of young people experiencing unemployment, who were required to attend an online "employability skills" session as part of their "mutual obligation" as recipients of the Job Seeker income support payment. The employability skills advisor facilitating the session was supportive in advocating for the young people in the group, and in encouraging them to "have their say" to local government organisations, schools, businesses and community leaders. Most of those present at the online meeting had their cameras turned off, and few appeared interested in participating in the project at all. However, a few days later, Ash, and a number

of others from that group, uploaded a series of video responses to the project's video questions. As Ash spoke - about their anxiety and mental health, their precarious financial situation, their estrangement from family and isolation at home in their share-house (their housemates had moved out during the lockdown) - the project team members, including myself, could sense that they were just "hanging on" at that moment.

Ash's story has enabled me to think more expansively about the connections between young people's participation in labour markets, education and training, and mental illness, gender diversities, precarious work, cost-of-living pressures, and secure and safe housing. The challenges that Ash was facing amid the COVID-19 lockdowns, highlight the limits and consequences of discourses, policies and programs which focus on the production of an "active, choice-making, responsible" subject (Rose & Miller, 1992, p. 187), and the "individualising narratives which call on young people to manage the effects of structural disadvantage" (Coffey, 2020, p. 67).

Ash's story speaks to many of the research findings that have described the ways in which COVID-19 amplified various economic and social inequalities and barriers which were pervasive prior to the pandemic (Cook et al., 2021, p. 331). Their story illustrates how young people's capacities to engage with education, training and employment are intimately connected to and shaped by cost-of-living pressures, precarious working arrangements, housing pressures, the social, affective and embodied dimensions of their gender diversity, neurodiversity and mental health and wellbeing. Ash has taught me to pay attention to these entanglements, and to consider the "cost" of the individualising, normalising discourses, interventions and programs explored in this thesis. And in particular, the ongoing work to be done in troubling discourses which reproduce and idealise hetero-normativity, "whiteness",

and “middle-classness”, in labour markets, and the discourses and stakeholder networks which structure education systems (Noonan and Kelly, 2019).

Part Two: Educating Enterprising and Aspirational Young People

Figures and Fantasies

In this part of the thesis, I examine how young people have been made knowable, and governable as enterprising and aspirational subjects of Australia's neo-liberal education apparatus. My overarching argument in this Part is that this apparatus reproduces disciplinary forms of power/knowledge/subjects which break down and disembody knowledge of young people's behaviours, and reproduce individualising, normalising and linear conceptions of young people's temporal orientations. In what follows, I am primarily concerned with the following research aim:

> Second Aim: To identify and analyse the relations of power/knowledge/subjects that shape those discourses that suggest that young people need to be educated to become enterprising and aspirational in relation to uncertain futures.

I address this aim through a closer analysis of some of the elements of this apparatus and the silences and subjugated knowledges that seek to govern the subjects in this education apparatus. Global organisations such as the OECD, UNESCO and the WEF have been key stakeholders in shaping problematisations of young people, education, skills and futures. Twenty-first century skills such as creativity, resilience and aspiration, curiosity, collaboration, and communication (among others), continue to be produced and reproduced in community, academic, political and policy discussions and debates that seek to describe what it is that individuals need to be and become in order to thrive in early twenty-first century societies and labour markets. In Australia's neo-liberal education apparatus, there has tended to be a focus on how to define, measure, and develop these skills, with an underlying assumption that young people are the problem that needs fixing in relation to uncertain futures. There are multiple but limited forms of subjectivity made available in/through discourses of twenty-first century skills, enterprise and aspiration. These subjectivities are the ways in which young people are understood as needing to govern themselves. Two key forms

of subjectification are discussed in this part of the thesis, which I identify as the figures of the enterprising subject and the aspirational subject. Chapter Three focuses on the ways in which the figure of the enterprising subject is able to function in an education apparatus, through disciplinary power/knowledge/subject relations (Foucault, 1977b). Discussions include themes and conditions such as the dividing practices of disciplinary knowledge and expertise, individualisation, normalisation and instruments of data measurement and visualisation. Chapter Four explores how discourses of aspirational subjects produce a moral obligation for young people to "align" with the jobs of the future. Chapter Four also focuses on the ways in which time is imagined as linear, accelerating and uncertain (Leccardi, 2005; 2012) in dominant discourses. I also engage with Arjun Appadurai's (2004) concept of the "capacity to aspire", and Rosi Braidotti's (2019) concept of "affirmative ethics" to consider different ways of knowing young people's aspirations and future orientations.

In order to frame this work, I briefly introduce some ways to think sociologically about young people as subjects.[26] The examples provided here mostly come from sociological and genealogical work which has interrogated contemporary problematisations of the concept of youth, and of different populations of young people. These tools include such things as Donna Haraway's (2016) "figures", which has been developed in different ways by Steven Threadgold (2020), Peter Kelly's (2000) concept of "artefacts of expertise", and Esther Faye's (1991) work on "governmental fantasies". Each of these tools provide different, yet

[26] In her contribution to the edited collection, *A Critical Youth Studies for the 21st Century*, titled "Disruption, Disassembling and Unthinking: 21st Century Youth Work in England and Some Lessons for Critical Youth Studies", Deidre Duffy (2015, p. 509) takes up a Foucauldian understanding of subject-formation, and draws on ethnographic work to explore how relations in youth work can be understood as "the embodiment of criticality". Duffy (2015) discusses how youth work involves the disruption of discourse and the disassembling of self as a central feature of its practice. Duffy's ethnographic work is productive for considering the Foucauldian project of "unthinking" subject positions, and a "disassembling" of the self in practice. This work has further enabled me to reflect on the embodied dimensions of my own work, the "entanglements" between Foucauldian tools, a genealogical approach, and encounters with young people in schools and youth service providers.

related ways of understanding the ways in which young people are made knowable as subjects, and governable in relation to different problems.

In her genealogical work, Esther Faye (1991) describes what she calls "governmental fantasies" of youth. Faye (1991, p. 67) argues that in Australia, in response to post-WWII recovery and reconstruction efforts, schooling became a site for the production of modes of individuality that would reproduce the idea of "character training for democratic citizenship". Faye (1991, p. 67) offers that these changes enabled "fantasies" about the normal adolescent schoolchild to function in the school, and sought to link the character of the individual to the economic and political condition of society. The state secondary school system at this time, according to Faye, became a way of regulating adolescent identities and behaviours necessary for the "reconstruction" aims of a post-war Australia (Faye, 1991, p. 66). Faye (1991, p. 66) describes how these fantasies were situated in a time that sought to enhance the school's role in "regulating and reproducing the broader and largely pre-existing categories and social relations of gender, race, ethnicity and class". Her work explores how "within the embrace of the school", the adolescent was discursively produced, as a problem, and in relation to Australia's self-representation as a liberal democracy.

"Figures" is an important tool used throughout this Part of this research and can be made to function in a similar way to Faye's use of "fantasies" of youth. It emerges from "Foucauldian" traditions of thought, and functions as an important tool which can signify the simultaneously "material-semiotic" function of discourses of/about the behaviours and dispositions of the individual self (Haraway, 2008). For Donna Haraway (2008, p. 4) figures "are not representations or didactic illustrations, but rather material–semiotic nodes or knots in which diverse bodies and meanings co-shape one another". This tool provides a vocabulary for how discourses constitute subjectivities by shaping, rewarding and punishing the subjects

whose behaviours are congruent or deviant from the norm (Vucetic, 2011, p. 1300). I use this concept of figures (of enterprise and aspiration) to signify these material–semiotic relations, throughout the following chapters.

Steven Threadgold (2020, p. 688) suggests that thinking with figures can be used to "illustrate how one thing can be used as a stereotype, cliché, meme, target, scapegoat, folk devil, stigma, discourse, and signifier". His metaphorical, and sociological use of figures focuses on how, in writing about young people, their lives, experiences, cultures and struggles, youth studies scholars are implicated in bringing into being particular figures of youth. Threadgold's (2020, p. 697) work is helpful for considering the figures of youth that are produced in the social sciences, in data mining, in applied education research, through "symbolic violence", and in public discourse. Using Bourdieu's conceptual framework, Threadgold (2020, p. 686) describes the symbolic violence caused through some metaphorical figures for youth, for example, the "dole bludger", the figure of the unemployed young person on government income support (Newstart allowance) as an "individualised scapegoat for economic challenges over which they have no control". Or, the figure of the "Millennial" as a generation of young people who "just needed to stop eating avocado on toast for brunch so that they could save for a housing deposit". "Hipsters" and "bogans" Threadgold argues, are figures which highlight particular orientations among young people, and toward young people, by political and business elites, media, and in public discourse.[27]

[27] Referencing Anita Harris' work in *Youth, Class and Everyday Struggles*, Threadgold (2017) suggests that the figures of "hipster" and "bogan" do "similar heuristic work" to the notion of "can do" and "at risk" figures. Threadgold (2017, p. 57) observes that the "reflexive and ironical use of gender and race have created new forms of discrimination", and suggests the "reflexive use of class tropes of hipster and bogan plays a very similar role by working to 'make class'", and to reproduce "immanent symbolic and moralistic class boundaries".

Threadgold (2020, p. 687) suggests that the field of youth studies too, plays a role in the construction of figures:

> Just as politicians or business advisors create versions of young people as rhetorical devices to obfuscate social and economic problems or to blame for the decline of western civilisation, social scientists construct their own heuristic versions of youth, depending upon their orientation towards them.

In this use of the tool/term, figures can also be understood as metaphors that stand in as signifiers for blame, moral panic, risk, or anxiety about the future. Metaphors which have consequences for the material realities enacted, and sense of self that are experienced and felt by their targets.

The concept of figure functions as a productive tool for unsettling the dominant, individualising knowledges of young people. In Kelly, Goring and Noonan's work (2021), we have used the concept of figures to examine how it is that Greta Thunberg, a leading climate activist in the School Strike for Climate (SS4C) movement, has come to represent a number of competing ideas, concepts, anxieties, and hopes about the future, the sixth mass extinction, and anthropogenic climate change. In that space, thinking with figures enabled us to describe how a vast array of events, places, technologies and discourses have enabled Thunberg to become recognisable as the individualised leader of a much wider collective social movement. In this instance, the concept of figures enabled us to examine how it is that Thunberg has become an object of inspiration, of affection, of disdain, of anger, of fear, of dismissal, of adult backlash. Figures, in this sense, can be used to examine how individual subject positions emerge from, are understood, and governed through, complex and diverse relationships, histories, and power/knowledge/subject relations. Just as Thunberg has become an individualised figure of the SS4C movement, I will argue that governmentalised knowledge practices and forms of expertise can produce discursive, idealised subject

positions, fantasies and figures, including neo-liberal constructions of enterprising and aspirational young people.

I now examine two key figures in Australia's neo-liberal education apparatus: the enterprising subject and the aspirational subject. These two forms of selfhood have emerged as dominant ways of knowing and governing what young people need to be and become in/for an uncertain future in this education apparatus. Chapter Three describes and discusses the figure of enterprising subjects which emerged in a series of reports produced by the Foundation for Young Australians (FYA) from 2013–2015. In that chapter, I reference Foucault's concepts of discipline and governmentality to discuss some of the relations of power/knowledge/subjects that have enabled these discourses to function. Chapter Four outlines how a cluster of OECD and national Australian education policy documents have framed young people as needing to align their aspirations with the jobs of the future. Chapter Four uses Foucault's concept of technologies of the self as a way of describing how this form of subjectivity is made possible in neo-liberal governmentalities. In both chapters, I identify and discuss various silences, absences and subjugated knowledges in these historical emergences, and signal some possibilities for thinking differently about these relations of power/knowledge/subjects.

Chapter Three: Being and Becoming an Enterprising Young Person

Introduction

This chapter examines the conditions that have enabled the figure of the young person as an enterprising subject to be reproduced in Australia's neo-liberal education apparatus. I argue that the dividing practices of disciplinary modes of power/knowledge operate in this education apparatus, and forge relationships between its elements, and the aims and needs of neo-liberal governmentalities. In developing this argument, I discuss how disciplinary power/knowledges of what young people should be and become are disaggregated, disassociated, disembodied, and visualised in discourses, practices, programs, models and interventions produced by key agencies in the apparatus.

The entry point to these discussions, is a series of reports produced by a prominent third sector youth advocacy organisation, the Foundation for Young Australian's (FYA), between 2015–2019. The *New Work Order* report series provides examples of the ways in which young people have historically been problematised as needing to become enterprising in order to navigate uncertain futures of work. This series emerged amidst the political, social, environmental and economic changes which framed the production of the *Melbourne Declaration* (MCEETYA, 2008), and against the backdrop to the lead up to the production of the *Alice Springs (Mpartnwe) Declaration* in 2019. This period in the FYA's history provides a significant example of the ways in which government, nongovernment organisations, and businesses forge networks and connections as key stakeholders in shaping Australia's neo-liberal education apparatus. This apparatus enables the circulation of claims that "we need an innovative and entrepreneurial generation of young people to maintain our standard of living" (FYA, 2017, p. 3). In Australia's neo-liberal apparatus, I argue, discourses of enterprise skills and enterprising young people are produced through disciplinary power/knowledge/subject relations which seek to break down, define, measure and visualise what young people should

be and become in/for a future that is defined by, and aims to serve the demands of future labour markets that are made knowable in particular ways.

For Weelahan et al. (2022, p. 12), skills are the "link between, work and education" which is made "concrete and considered a thing in itself" through it's "divisible nature". The strategic aims and needs of Australia's neo-liberal education apparatus, including "to supply skilled labour for work", are possible because of these disciplinary practices, and the shaping of power/knowledge/subjects through these abstractions. For Foucault (1977b, p. 173) discipline is aimed at "the progressive objectification and ever more subtle partitioning of individual behaviour" as a way of establishing a "micro-scope of conduct". As I argue, to be and to become an enterprising subject means to conduct the self as an autonomous, economically rational, responsible individual, who can thrive amidst the risks and opportunities of an uncertain future (Kelly, 2013). The production of the enterprising subject is a key aim and element in Australia's neo-liberal education apparatus. The call for enterprising subjects is a contingent and strategic claim, which requires the subjugation of various knowledges in order that it can function as true.

The Foundation for Young Australians (FYA) and Enterprise Skills

The FYA is a third sector youth advocacy organisation that is funded through collaboration between philanthropic organisations, businesses and government. Their website (in 2022) traces their beginnings "to the 1977 launch of the Queen's Trust for Young Australians, as well as the 1988 establishment of the Australian Youth Foundation" which merged in 1999 to become the FYA (FYA, 2022, n.p.). In their strategic report, *Transform the Futures: Strategy 2021–2023* (2021) the FYA states that "we exist to back young people":

> We back them to remove barriers by creating and scaling projects where individual young people are put in decision-making and leadership positions. We back them to

> design solutions, including them as equal partners in the design of systems and services.
>
> We back them to create change, by building the strength and sustainability of youth-led movements to progress and win campaigns. We back First Nations young people and their communities to work towards self-determined First Nations justice.

The FYA claims to bring together "strategists and advocates, facilitators and trainers, researchers, capacity-builders and consultants" to "back young people" with the "trust, resources, skills and connections to make change" (FYA, 2021, p. 15). According to the FYA (2021, p. 9), young people are "Unable to vote, under-represented in our Parliaments, undervalued in casualised workplaces, and unheard in our media, young Australians are not disengaged – but they are chronically disempowered". This strategy document states that "Addressing young people's structural disadvantage, and elevating their voices, are inextricably entwined" (FYA, 2021, p. 9). The FYA claims to provide opportunities for young people to access grants, participate in advocacy opportunities and First Nations justice projects, and the co-design of civic engagement programs.

Prior to the recruitment of their new CEO Nick Moraitis, and the production of *The New Work Standard* (FYA, 2020) report in 2020, the FYA had taken a much different approach to youth advocacy. Under the leadership of its previous CEO Jan Owen, the FYA was focused on the promotion of an innovation and enterprise strategy, increasing young people's engagement with the opportunities of the gig economy, skills development, job transitions, and the production of optimism about the future. According to *Change One Thing* (2022, n.p.) Owen is a "social entrepreneur, innovator, influencer and author", who was awarded the Order of Australia medal for services to children and young people in 2000, and spent eight years as CEO of the FYA. During that time, Owen led the organisation's "strategic mission to equip young people to create, lead and thrive into the future" (Change One Thing, 2022, n.p.). Between 2015 and 2019, with Owen as CEO, the FYA undertook significant research

and advocacy work redefining the purposes of education with a focus on young people's enterprise skills, and teacher capability. This chapter traces and analyses the FYA's work during this period of around five years (2015–2019). During this time the FYA produced a suite of reports, publications, media events, spaces and programmes which mobilised the idea that young people would be better equipped to navigate a flexible, automated, globalised future if only they developed and leveraged their transferable, enterprise skills.

The *New Work Order* series of reports began with the publication of *The New Work Order* (FYA, 2015a). The series also includes: *The New Basics* (FYA, 2016a); *The New Work Mindset* (FYA, 2016b); *The New Work Smarts* (2017); *The New Work Reality* (FYA, 2018); and *The New Work Standard* (FYA, 2020). The final report in this series, published during, and framed by, the first few months of the COVID-19 pandemic in 2020 and subsequent economic crisis, marks a significant shift in focus, as I will make clear in what follows.

At a national level, the FYA has had significant influence in producing and reproducing policy discourses through the concepts of enterprise and innovation that figured heavily in this series. Though their directions might have changed, I discuss this event in the FYA's history, because it is a significant and consequential example of the ways in which Third Sector, non-government organisations can function as key stakeholders in shaping discourses aimed at the production of particular subjects in Australia's neo-liberal education apparatus.

As a key agency in the education apparatus during this period, the FYA also has a number of strategic relationships that enabled them to produce discourses of enterprise skills, and which enabled these discourses to gain authority. As I discuss in greater detail shortly, the strategic economics consultancy, AlphaBeta: Strategy and Economics Group had a key role in informing the research behind discourses of flexible labour markets and automation that are amplified in the FYA's reports during 2015 to 2020. As one of the primary youth advocacy

organisations, functioning at the national governance level, the FYA mobilised much of its work at the intersections between young people's post-secondary school transitions, pathways and shaping the role of schooling, teacher professional development, education and training in preparing young people for work. In this sense, the FYA was a key agency in defining what young people should become in order to thrive in the face of uncertain futures characterised by flexible labour markets, and increased gig and casual work.

What is important about the FYA's model of enterprise skills is that it reproduces concepts which circulate through reports from global north education and labour policy makers such as the OECD and WEF. As outlined in Chapter Two, within an education apparatus in Australia, discourses of critical and creative, resilient, aspirational, adaptable, and curious young people are brought together in order to produce young people as subjects who can govern themselves as choice making, autonomous, and responsible:

> Young people need to learn enterprise skills now to prepare them for the economy of the future, so they can become job creators, not just job seekers, and navigate more complex careers. Enterprise skills are generic skills that are transferrable across different jobs. They have been found to be as powerful a predictor of long-term job success as technical knowledge and will be increasingly important into the future (FYA, 2016a, p. 1).

In promoting the enterprise skills agenda during that time, the FYA claimed to be "all about backing the next generation of young people who are going to rethink the world and create a better future" (2016a, p. 2). The "type" of young people FYA wants to "back" are the "young changemakers – the innovators, the makers, the dreamers, the thinkers, the doers and the creators" (2016a, p. 2). Across the early documents in this report series, the FYA was interested in backing active, enterprising subjects/young people, and those who are willing and able to mobilise in response to the opportunities of the enterprise agenda.

The first of these reports, *New Work Order* (2015a), included a Foreword written by the then FYA CEO Jan Owen, which outlined the strategies and skills required to navigate the "complex careers of the future". This is a future defined by three forces: "automation, globalisation and more flexible work". The tagline to the report reads: "Ensuring young Australians have skills and experience for the jobs of the future, not the past". The three forces, like the global megatrends described later in Chapter Five, are imagined as offering "the opportunity not only for higher productivity jobs, but also more creative, independent and meaningful employment" (2015a, p. 3). Those opportunities are framed under the themes; "low barriers", "more flexibility" and "wider markets and more specialisation". The third section of the report addresses the "risks" of the new work order, under the themes of "unemployment", "inequality" and "insecurity" (2015a, pp. 23–27). The *New Work Order* (2015a, p. 7) frames young people in relation to the kind of workers that a rapidly changing, digitally disrupted, labour market requires:

> The technologies that automated millions of routine transaction jobs (such as clerical work) and production jobs (such as assembly-line work) are now rapidly encroaching on more complex routine and non-routine tasks. In Australia, some 40% of our current jobs are considered at high risk of automation over the next 10–15 years. Critically, our young people are not being trained in the jobs that will survive automation. More than half of young Australian students are currently getting educated for dying jobs and nearly 60% of students are being trained in occupations where the vast majority of jobs will be radically affected by automation in the next 10–15 years. If we focus on VET [Vocational Education and Training] students, this number rises to 71 per cent of students.

The report Overview begins by emphasising the central role of work to the lives of young people (2015a, p. 5):

> Work has long been important for the livelihood, dignity, and happiness of humankind. We intuitively and statistically know that work helps us meet our most basic and complex needs, providing a path towards financial security, mental and physical health, dignity and meaning. For at least the past century, the prospect of a good job that pays a fair wage has been part of Australia's promise to our young people.

And given the importance of work, the report states, there is a "quiet revolution occurring in the way we work", including in the redundancy or displacement of masses of "blue collar" and "white collar" workers due to technological changes such as automation shifting the industrial model. The FYA (2015a, p. 8) argues that the "effects of the forces of the future of work are not ambiguously positive". While unemployment, inequality and insecurity are key risks of current and future labour market changes, the FYA (2015a, p. 9) states that these "inherent risks", "need not be cast in stone", and that the "critical question for Australia is":

> How do we ensure that the future of work maintains reward and opportunity for all young Australians? The answer depends, in part, on our policy responses. In this document, we look at some of the ways policymakers around the world are dealing with similar challenges and opportunities. We have observed policies that both enable participation in this future of work and protect workers from the downsides. Many of these policies are worthy of consideration in Australia. We can take active steps to both enable young people in this future and offer protections against the worst risks.

These reports promote a sense of optimism as they imagine the future of work and the impacts of automation and deregulation. The report focuses largely on "enabling" policies, and the opportunities that digital literacy and infrastructure, entrepreneurship and enterprise skills offer to global economies and to young people (FYA, 2015a, p. 18). Policies which aim to drive employment-focused and innovation-focused entrepreneurship are amplified while adaptation of workplace protections, and reform of the tax system in favour of labour are considered. Under "policies to enable" the FYA (2015a, pp. 30–36) suggests that "Australian governments could consider":

- Implementing a mandatory computing or digital technologies curriculum from primary school
- Ensuring access to digital infrastructure e.g. broadband in all schools and communities
- Embedding enterprise skills, especially problem solving, creativity and social intelligence, in school curricula as general capabilities and in individual subject curriculum

- Training and promoting teaching methods that support problem solving capabilities

- Promoting entrepreneurship as a viable career option to school and tertiary students

- Providing strong start-up incentives for young people including income support, grants, loans with preferential terms, tax exemptions and guidance/coaching

- Making publicly funded education places in VET and university available to students wishing to undertake entrepreneurship education in facilities run by entrepreneurs

- Using public expenditure to drive demand for employment among key groups at risk of non-participation

- Providing the option for superannuation accountholders to invest some of the superannuation in a Venture Capital (VC) & Private Equity (PE) innovation stream

- Relaxing the constraints around crowdfunding.

Under "policies to protect" the FYA (2015a, pp. 38–40) suggests that "Australian governments could consider":

- Reducing the tax wedge, or the difference between employer payment and take-home pay, by lowering the tax rate on low-income labour

- Offsetting income tax rates reductions with higher taxes on capital gains and select consumption

- Increasing initiatives to 'make work pay' for low-income workers, including tax credits

- Creating an intermediate category of labour between independent contractor and employee

- Appointing an advisor to government on the freelance economy

- Encouraging or requiring online digital platforms to self-regulate

- Promoting the creation of workers benefits and protections that match the 'unit-level' of tasks in the freelance economy.

Importantly, the list of policies to protect young people do not include increases to real wages or enterprise bargaining agreements, and instead the focus is on tax credits and structural changes to accommodate for the freelance economy. In *The New Work Order*, the FYA draws on ABS and AlphaBeta data to map the jobs which are considered "high-skill" or "high-touch", and which are likely to grow, unlike manual, "routine, rule-based activities". AlphaBeta has been a key stakeholder in the design of the FYA's agenda and reporting over the past 5 years.

AlphaBeta is listed as a key collaborator in shaping these understandings of and responses to digital disruption and automation. AlphaBeta was a strategy and economics advisory business with offices previously based in Melbourne and who worked with the FYA to deliver the *New Work Order* research series. In 2020, the Australian consultancy was acquired by Accenture, an Irish-American information, business and technology consulting company.[28] The Singapore based element of the AlphaBeta consultancy was not sold with the acquisition and continues to operate with similar focus to the Melbourne based consultancy.[29] In 2015, AlphaBeta produced the report *The Automation Advantage* which included the byline, "how Australia can seize a $2 trillion opportunity from automation and create millions of safer, more meaningful and more valuable jobs". The report (AlphaBeta, 2015, p. 1) states that "Automation is causing Australian workers to rely more on their brains and personalities than on physical labour. By 2030, machines will likely take over 2 hours of our most repetitive manual job tasks per week". AlphaBeta develops a historical narrative about the impact of

[28] See, https://www.accenture.com/au-en

[29] See, https://alphabeta.com/

automation across industries since the 1950s, stating that "past waves of technological disruption have ultimately led to increased prosperity, productivity and employment" (AlphaBeta, 2015, p. 17) yet they raise concerns that "this time around the impact of technological change on employment will be much more profound". They argue (AlphaBeta, 2015, p. 17) that jobs are at risk from AI (artificial intelligence) that involve "machine learning techniques like deep neural networks allowing us to realise outcomes including image and speech recognition", and that "computers are now able to drive cars, trade stocks, detect fraud, and recognise speech to answer basic questions". This report draws on International Social Survey data, a global survey that asks workers the eight most important job characteristics impacting their happiness at work. Drawing on the AlphaBeta report, the FYA summarises some of the findings in the *New Work Order*. The FYA (2015a, p. 17) states that "The survey reports that 20% of respondents in OECD countries believe that having a high income is very important. But nearly 60% say that job security is very important, 50% say interesting work is important and 30% say autonomy is important".

Despite the views cited from this survey, and the risks identified in the report, the FYA focuses increasingly, throughout this series, on the opportunities offered by automation, globalisation and collaboration, for higher productivity and more flexible, and innovative forms of employment. The report also addresses a number of opportunities regarding "on-demand" work in a gig economy and a more cost-effective market for small business incubation. Under "key-risks", the FYA (2015a, p. 23) summarises debate about the possibility of workforce-wide unemployment due to automation, drawing on the idea of "skill biased technological change" as a key issue:

> secretarial functions in offices have been partially replaced by computers and supermarkets now use automated checkout machines. At the other end of the spectrum, skilled workers have enjoyed efficiency benefits from the introduction of machines. Economists call these two forces 'skill biased technological change' which

> means that, over time, new technologies have caused the employment and incomes of skilled workers to increase.

The FYA's (2015a, p. 23) description of the "distributional impact" of "skills biased change" is interesting in relation to their focus on promoting enterprise skills, and those jobs which are likely to withstand processes of automation. The report claims that there is an unequal distribution of change across sectors and occupations filled by young people, where 60 per cent of young people are employed in occupations where two thirds will be affected by automation. In summarising their position on possible policy solutions to these challenges, and youth unemployment, the FYA (2015a, p. 28) states that most "policies are targeted *first* towards enabling workers to find opportunity and reward in the future of work and, where enablement reaches its limits, are focused *second* on protecting workers from downside risks [original emphasis]".

For the FYA, reforms such as enhanced entrepreneurship education and start-up incentives, and policy changes to relax rules on crowd-funding initiatives, were linked to higher income (for participants) and more secure employment outcomes. Yet global worker protection policies are understood in terms of the call to boost "online talent-platforms" and "tax-credits" and reduce income tax as ways of increasing GDP and creating jobs (2015a, p. 23). The FYA's focus on enabling, and on the opportunities of flexible work and the gig economy, serves to produce a significant silence at this moment in the development of the enterprise discourse. In their focus on enabling policies, transferable enterprise skills, and the opportunities of labour market change, the FYA rarely address the role of labour market structures, the distribution of the impacts of deregulation and de-industrialisation across different populations and places, young people's needs, challenges and voices in different localities, or the possibility of systems change in order to support young people in/for their futures both in work and the sustainability of life on the planet. Instead, the FYA provide

examples of the ways in which organisations in Australia's neo-liberal apparatus can produce forms of re-regulation in which the insecurities and burdens of a free-market economy are visited on young people's lives as individual responsibility to develop skills.

During this period from 2015–2019, the FYA understood education as the solution to the problem of "skill biased change". They state that Australian education and training systems need to "boost digital literacy", and to "place enterprise skills at the heart of learning" in order to "drive both employment focused and innovation-focused entrepreneurship" (FYA, 2015a, pp. 30–34). However, suggestions such as "reforming tax and transfer system in favour of low-income labour" so that young people in low-income jobs pay less tax, was discontinued in subsequent reports throughout the series (FYA, 2015a, p. 38). It is not until some years later, in 2020, that *The New Work Standard* (FYA, 2020) turns back to focus on protection policies, as the FYA developed their work in response to the inequalities highlighted by the COVID-19 pandemic.

In November 2015, the FYA produced *How Young People Are Fairing* (FYA, 2015b). This report states that "a significant minority are not developing the enterprise skills they will need for future work" and are finding it harder to move into full-time work (FYA, 2015b, p. 3). "Our solution" according to FYA (2015b, p. 3) is "a national enterprising education strategy for young people" and "enterprise skills". These so-called enterprise skills, are referenced to the FYA's *Unlimited Potential* (2014) report. The *Unlimited Potential* (2014) report does not cite any particular source, methodology, or research in defining these skills. These skills include:

- Confidence & agency
- Creativity & innovation

- Enthusiasm for ongoing learning
- Ability to critically assess information
- Working with others
- Communication
- Project management
- Financial literacy
- Digital literacy
- Global enthusiasm / citizenship (FYA, 2015b, p. 3).

This list echoes the keywords found in transformative competencies and twenty-first century skills discourses produced by the OECD and WEF, outlined in the Introduction to this thesis.

By April 2016, *The New Basics* (FYA, 2016a, p. 5) report was produced with what the FYA call "big data analysis", which included a scan of 6000 websites with 4.2 million jobs ads over three years. This research sought to organise and synthesise (drawing on sets of synonyms) the specific skills needs and wants of the employers and agencies who posted those job advertisements. The analysis resulted in the following definition of eight core enterprise skills. The FYA's enterprise skills became an influential representation of those skills.



Figure 3.1 Enterprise Skills (FYA, 2016a, p. 4)

In addition to a description of the specific enterprise skills commonly demanded by employers, the FYA created a link between them, and the need to reform training systems in line with these demands. Following Foucault (1977b, p. 140), the FYA can be understood as mobilising disciplinary relations of power/knowledge here, as they seek to break down, define and regulate at an "infinitesimal" scale, young people's behaviours, literacies and dispositions in order to manage and govern them in alignment with the neo-liberal "economic or technical rationality". *The New Basics* report (FYA, 2016a, p. 12) states that 35 per cent of young Australians have low proficiency in problem solving, 27 per cent in digital literacy and 29 per cent in financial literacy. Foucault's critique of taxonomic order and representation is relevant here. These disciplinary practices enabled the FYA to produce a more robust relationship between their research about what employers demand, and their claim that young people in Australia rank with low proficiency or lack (according to PISA test results) in those skills areas (FYA, 2016a, p. 17).

In addition to young people's perceived lacks in terms of universal notions of skills, *The New Basics* (FYA, 2016a) suggests that teachers are also lacking skills to teach them. This claim is drawn from the results of an analysis of teacher responses to the OECD's *Teaching and Learning International Survey* (TALIS) 2013, which identifies that only one in 10 teachers had attended professional development (PD) that was concerned with "approaches to developing cross-occupational competencies for future or future studies" (FYA, 2016a, p. 8). The OECD, as discussed in Chapter Four, are also a key agency in this apparatus, and their strategic relationship with the FYA can be seen here through these knowledge exchanges. In this sense, teachers are also framed as unskilled, and as not being capable of meeting their responsibilities for delivering on the promises of twenty-first century, enterprise skills education, or preparing young people for an uncertain future of work. The FYA states that Australian education systems, schools and teachers need to partner with businesses to

understand skills needs and to take greater responsibility for developing them to meet market demands. Wendy Brown (2015, p. 132) argues that these kinds of technologies of government, task those "at the end of the pipeline", such as students and teachers, "with discerning and undertaking the correct strategies of self-investment and entrepreneurship for thriving and surviving". Brown (2015), drawing on Foucault, describes these kinds of discourses as mobilising technologies of "responsibilisation". In this sense, the FYA proposes that teachers must rethink their professional selves, their teaching methods, their developments, and to partner with employers, in order to manage the problem of youth unemployment, casualised and precarious youth labour markets, and uncertain futures.[30]

In November 2016, *The New Work Mindset* (2016b) was published. This report produced a connection between the enterprise skills agenda and new concepts for understanding occupations and jobs. It argues that young people should adapt to new ways of thinking about traditional occupational definitions and boundaries, and these are captured in the FYA's "job clusters" concept (FYA, 2016b, p. 4). Job clusters are framed as new career-based identities through which young people should imagine their work and life trajectories. The report claims that in past decades, individuals typically pursued a single career path, but that young people now need transferable, enterprise skills to leverage mobility across different occupations. The FYA (2016b, pp. 14–15) identifies seven job clusters, that aim to drive young people to consider the "portability" of enterprise skills:

> The Generators […] require a high level of interpersonal interaction in retail, sales, hospitality and entertainment.

[30] This approach to identifying the deficiencies in teacher skill, character and development had also become a key theme in the work of the OECD since that time. Reports such as *What schools for the future?* (OECD, 2001), *Teachers matter: Attracting, developing and retaining effective teachers* (OECD, 2015) and *Preparing teachers and developing school leaders for the 21st century: Lessons from around the world* (OECD, 2012) capture some of this work.

> The Artisans […] require skill in manual tasks related to construction, production, maintenance or technical customer service.
>
> The Carers […] seek to improve the mental or physical health or well-being of others, including medical, care and personal support services.
>
> The Coordinators […] involve repetitive administrative and behind-the-scenes process or service tasks
>
> The Designers […] involve deploying skills and knowledge of science, mathematics and design to construct or engineer products or buildings.
>
> The Informers […] involve professionals providing information, education or business services
>
> The Technologists […] require skilled understanding and manipulation of digital technology.

Young people are imagined in this model as needing to become more flexible, and adaptable in their career paths. The job cluster concept frames what the FYA sees as the demise of traditional career trajectories, jobs and occupation definitions, and as an opportunity for young people to experience an increased flexibility to move among roles of their choice.

Building on this framework, in *The New Work Smarts* that was published in July 2017, the FYA made the case for further development of the enterprise skills agenda, this time problematising young people (and their teachers) in terms of needing to become smart learners, smart thinkers and smart doers (FYA, 2017, p. 7), assuming, it seems, that young people and teachers had no "smarts" to begin with. The FYA (2017, p. 1) reflected on the work that they had developed in previous reports, along with the vocabulary that had emerged for thinking beyond career linearity:

> Through four key reports, the research has revealed that traditional, linear career trajectories are rapidly becoming an antiquated notion. It's more likely that a 15-year-old today will experience a portfolio career, potentially having 17 different jobs over 5 careers in their lifetime. They might be self-employed, working for other people or doing both – whilst also collaborating with people on the other side of the world.

The New Work Smarts (FYA, 2017) report also defines a time horizon of "2030", in which the promises of the enterprise skills agenda should be developed and delivered. This time

horizon had become common among many high-level policy documents across OECD nations, possibly as a consequence of the influence of the United Nations Sustainable Development Goals framework for global action for Sustainable Development. The inclusion of a time horizon of 2030 in relation to job clusters, skills, the future of work, and portfolio career concepts, made it possible for the FYA to mobilise a sense of urgency and acceleration around the production of systems which can deliver on these changes. This approach enabled the FYA (2017, p. 8) to make more concrete statements such as "we now know that problem solving will be used for 12 hours a week at work in 2030", and to then redefine the purposes of education through rhetorical questions such as "but do our schools, vocational and training institutions and universities spend enough time teaching and assessing this skill?". *The New Work Smarts* (FYA, 2017, p. 8) states that "the most progressive education systems are focusing on developing the 'new work smarts'", and in many ways this report takes a wider aim at young people in relation to the concept of "work". In 2030, work, the report maintains, will be continually changing, and the idea of "smart learning" points to the need for young people to develop what is even beyond the enterprise skills made knowable to that point. Young people are problematised not only as needing these skills, but as always needing to become something more, to become someone "smarter".

"Smart thinking", for the FYA (2017, p. 8), means being able to constantly adapt to the always changing character of, and demand for enterprise skills, STEM skills, and other undefined skills. "Smart doers" are those active subjects who mobilise and take action in response to the entrepreneurial mindset (2017, p. 8). *The New Work Smarts* provides an example of the way that the FYA had been structuring, and often silencing, understandings of the relations, practices and materialities of inequality, disadvantage, discrimination, and injustice, despite marketing itself as a youth advocacy organisation. Instead, the FYA's *New Work Smarts* report presented an optimistic view of the present and the future, focused on

enabling young people to leverage their enterprise skills in a competitive, globalised labour market.

The New Work Reality (FYA, 2018, p. 3) report sought to bring "young people's perspectives to the centre" through a review of 14,000 young people's (aged 15–25) feelings about work. In *The New Work Reality*, the FYA (2018, p. 36) cite "the Longitudinal Survey of Australian Youth (LSAY), managed by the National Centre for Vocational Education Research (NCVER)" as its key data source. According to the FYA (2018, p. 36) the LSAY, "follows the same young people over time across Australia, running the survey from age 15 every year for 10 years until age 25" and the study report used "the 2006 cohort where participants completed the final survey in 2016 at 25 years of age". Drawing on the results of this survey, the FYA (2018, p. 9) define key "barriers to work" which they find as a primary cause of youth unemployment. These "barriers to work", the FYA suggests, pose a significant risk to both Australia's gross domestic product (GDP) and young people's wellbeing (FYA, 2018, p. 9):

> 31.5% of young people are unemployed or underemployed. Having so many young people out of the workforce costs our economy 790 million lost hours of work each year, equating to up to $15.9 billion in lost GDP to the Australian economy annually. The social impact is equally compelling – loss of confidence, hope and self-esteem has led to mental health issues costing Australia $7.2 billion per annum.

That final sentence, comes from earlier FYA (2014) research, titled *Unlimited Potential.* This logic of assigning monetary value to explain the relationship between unemployment and young people's mental health issues, confidence, hope and self-esteem is problematic. It links young people's unemployment with their ability to develop skills, and their apparent inability to develop those skills, to the billions spent nationally on mental health services. *Unlimited Potential* (FYA, 2014), published prior to the development of the *New Work Order* series,

defined the four priority areas to start this conversation about the resources needed to enable young people to shape Australia's future. They included:

- Educate and equip young people with enterprising skills
- Invest in young Australian social and business entrepreneurship
- Turbocharge young people's connections with Asia
- Back young people to contribute and lead change (FYA, 2014).

By the time *The New Work Reality* was published in 2018, the report series had shifted, somewhat, to investigate the main barriers, overwhelmingly framed by the word and idea of "lack", preventing young people from transitioning to full-time work (FYA, 2018, p. 9), including: "Not enough work experience"; "Lack of appropriate education"; "Lack of career management skills"; and "Not enough jobs". The FYA continued to focus on solutions to this lack in *The New Work Reality*, referencing their *Unlimited Potential* report from 2014 as an earlier source:

- Enterprise skills
- Relevant paid employment
- Future focused clusters
- An optimistic mindset (FYA, 2018, p. 9).

That young people need to develop and practice an "optimistic mindset", is also central to the FYA's response to much wider structural problems regarding labour market change and uncertainty (FYA, 2018, p. 3). According to *The New Work Reality*, young people need to be optimistic about their inevitably uncertain futures, about the promises of the enterprise skills agenda, and about the rewards that this orientation might produce. Up until 2018, the FYA was focused largely on the problematisation of young people as universal subjects of

enterprise skills. Young people were imagined as needing to become optimistic in the face of uncertainty. Meanwhile, the opportunities and risks of these uncertainties, were, and still are distributed unequally across populations of young people in the places where they live. The FYA had not, over these few years in youth advocacy and policy development, mobilised a skills paradigm with disadvantage, marginalisation or inequality in the foreground. Instead they had produced generic models of the enterprising behaviours that young people should cultivate with anticipation for an uncertain future.

In the months prior to the beginning of the COVID-19 pandemic outbreak and subsequent economic and health crisis, Australia witnessed a bushfire which killed 34 people and three billion terrestrial vertebrate, and destroyed 46 million acres of land and 6000 homes. During this time, the FYA shifted focus, and with a new CEO Nick Moraitis, produced the report, *The New Work Standard* (FYA, 2020). This report differs from the focus on innovation and enterprise, gig economies, skills and optimism discourses that make up the earlier reports in the series. The final report is framed by the COVID-19 pandemic, the disruptions that the health crisis caused for labour markets, and the rapidly increasing youth unemployment rate at the time. The report is an example of the dramatic shift that was occurring across many organisations to focus on protection strategies and policies which acknowledge and support the disproportionate number of young people working in precarious, casual and gig economy work. This is still a common theme in Australian Bureau of Statistics (ABS) and Australian federal government reporting on unemployment rates. In the opening to *The New Work Standard*, the FYA (2020, p. 2) attests that:

> Australia has long been at the forefront of industrial reform – crucial changes that introduced minimum wage, enterprise bargaining and compulsory superannuation have ensured that the majority of Australians have had access to workplace protections. However, even before Australia was thrown into a response to a global pandemic, a growing proportion of workers sat outside of this safety net – many of them young people.

In this context, the FYA (2020, p. 2) states that:

> We found that young people were disproportionately represented in flexible work – and that this number was growing. For example, since 2016, we estimated there had been a 340% growth in the number of people engaging in gig work (on-demand work obtained through digital platforms) with people aged 18–34 years-old making up more than half of this number.

While the FYA had become a major stakeholder in mobilising discourses aimed at young people's skills in/for precarious, flexible labour markets, the new report focuses more closely on identifying the risks of these changes, where "young people in casual employment are experiencing greater vulnerability around financial and job security due to the impact of COVID-19" (FYA, 2020, p. 4). The FYA's renewed focus in 2020 was on the definition and promotion of good work and quality jobs as the new standard to which many young people should aspire. Their focus also shifted to address the risks and opportunities of flexible work, particularly as they identified, "that the risks young people had identified with flexible work prior to the pandemic were now playing out" (2020, p. 19). The FYA (2020, p. 38) stated that the COVID-19 pandemic had disproportionately impacted young people, as they are overrepresented in flexible work, and in labour market sectors most heavily impacted by lockdowns and economic downturn: "For 15–19 year-olds, the accommodation and food services sector provides employment for more than 35% of young working people. For 20–24 year-olds retail trade, at 18%, and accommodation and food services, at 15%, are the two biggest industry employers".

In response the FYA (2020, p. 32) developed a "multidimensional" concept of "good work", which includes flexible work, but also acknowledges that "flexible workers are more exposed to risks than those in traditional employment". The FYA (2020, p. 4) defined four pillars of good work and their definitions, including:

- Access and inclusion: ability to secure work through an equitable approach to hiring and contracting

- Protection and wellbeing: protection against injury or harm, access to income security and provision of support for personal or community events

- Quality and control: fair agreements, contracting and processes for work and the ability to earn a living wage, access to fair pay and standards for wages

- Growth and development: access to opportunities for progression including ways to build skills and networks as well as recognition of skill development and portability across work.

> While the standard can apply to all workers, FYA believes Australia should start by looking at young people, who are most at-risk of falling behind in our economy, now more than ever.

In order to define the four pillars, the FYA (2020, p. 32) states that they:

> analysed existing legal frameworks and tests, policy frameworks and voluntary codes, as well as expectations arising from workers surveys and feedback from the workshops. Based on these, we grouped and categorised key worker needs, community expectations and policy goals into four core elements that enable good work.

The FYA suggests that *The Good Work Standard*, the multidimensional concept of good work and its four pillars, are designed to protect young Australians from the risks that accompany a flexible economy and those who engage in flexible work. The purpose of FYA's policy recommendations is to produce "an immediate way forward without legislative or regulatory change" (FYA, 2020, p. 34). Their recommendations for protecting young people in flexible work relies on employers to voluntarily apply and adhere to the principals of "good work". Despite this definition of good work and turn to protection policies, the FYA continued to imagine the individual young person as responsible for the management of the risks of a globalised neo-liberal version of capitalism, rather than the possibility or need for structural changes (FYA, 2020, p. 38):

> The impacts of COVID-19 have reinforced the need for better support for young people to navigate flexible work and manage the risks, including understanding tax and superannuation implications, their agency and rights, and where to seek support should they need it […] For workers, the Standard can help build a better understanding of what their needs are from any given working arrangement and what can be considered/ requested to ensure they have access to good work.

Since 2015, the FYA has been seeking to redefine the purposes of education, with young people, their skills, and their teachers' capability, understood as being at the centre of interventions in responding to uncertainty, crisis, youth unemployment and the risks of precarious, flexible work. The FYA's *New Work Order* series, produced between 2015 and 2020, is an example of the ways in which enterprise skills had emerged as a significant discourse amplifying the relations between young people, education and work, in a way which frame young people's skills and dispositions as the primary point of intervention in managing the problem, and reproduction of, uncertain futures.

Discourses of enterprise skills, and the idealised figure of enterprising young people, are shaped by disaggregated, disassociated and disembodied forms of disciplinary power/knowledge. These disciplinary micro-technologies enable the FYA, and many other stakeholders in Australia's neo-liberal education apparatus, to govern young people as responsible for their success and failure in an uncertain present and future. There is the sense that in the development of this enterprise skills concept, young people (and teachers and education systems) are imagined as needing to be governed in ways that require ongoing reconstruction and transformation, in order to align with the needs and aims of labour markets. Terms such as "enabling", "opportunity" and "optimism" frame the FYA's enterprise skills model during this period, and echo the kind of problematisations of schooling and young people that were developing throughout the late 80s and early 90s through changes to Australian education and schooling policy and curriculum and the neo-liberal problematisation of liberal welfare government.

My argument here is not that the Foundation for Young Australian's are a "bad" organisation, nor that they did not have many positive impacts on young people's lives during this episode in the emergence of enterprise skills (Foucault in Dreyfus & Rabinow, 1982, pp. 231–232). Instead, their work as captured in this episode, provides a significant "example" of the "danger" of disciplinary power and neo-liberal governmentalities which function in seeking to shape the idealised subjects in this education apparatus (Foucault in Dreyfus & Rabinow, 1982, pp. 231–232). The following section develops a more detailed analysis of the conditions which enable these discourses to function as influential truth claims about what young people should be and become.

Discussion: Being and Becoming an Enterprising Subject in Australia's Neo-Liberal Education Apparatus

In this discussion I address a number of key themes that have emerged from a genealogical analysis of this episode in the historical emergence of the FYA's enterprise skills program, and the roles that it has played in the ongoing emergence of Australia's neo-liberal education apparatus. The examples described in this chapter provide a way of explaining how particular relations of power/knowledge/subjects arrange the elements in this apparatus, and enable the apparatus to govern young people as problems that require intervention. This discussion elaborates several key themes. In particular, the various micro-technologies of disciplinary power/knowledge/subject relations, including the "dividing practices" of disciplinary power, and the role of psych-disciplinary expertise, the individualisation of young people and the visualisation of these behaviours and dispositions as "fluid signifiers" which flow throughout the elements of the apparatus. Each section engages with Foucault's work, in particular his influential *Discipline and Punish: The Birth of the Prison* (1977b). I also refer to the work of Oksala (2016) and Blackmore (1992), to discuss the dividing practices of disciplinary knowledges, and some of the limits of those practices in relation to the reproduction of

education and skills discourses. I draw on Faye (1991) and Tait (1995) to discuss the ways in which technologies of individualisation and normalisation have been mobilised in education, through psych-disciplinary expertise, and argue that these practices continue to be significant in Australia's neo-liberal education apparatus. Citing the work of Noonan and Kelly (2019), and revisiting the work of the WEF, I also discuss the limits of the forms of data measurement and visualisation that are key elements in this apparatus, and which enable this figure of enterprising young people to circulate and gain authority.

The Dividing Practices of Disciplinary Knowledge

The "humble modalities and minor procedures" (Foucault, 1977b, p. 170) which I have identified in the FYA *New Work Order* report series, are some of the conditions that have enabled third sector agencies to become key stakeholders in governing the relations between young people, education and the future of work. As a key stakeholder in enterprise, education and youth advocacy systems, the FYA have drawn on a range of disciplinary technologies in order to shape these relations of power/knowledge/subjects. The FYA's work exemplifies how the dividing practices of disciplinary knowledge make it possible for governmentalities to "connect the lives of individuals, groups and organisations to the aspirations of authorities in the advanced liberal democracies of the present" (Rose & Miller, 1992, pp. 175–176). Such practices of breaking down and imposing an order on the possible range of behaviours of young people, are critical in enabling organisations an agencies to assert their own authority in this education apparatus, and in making claims about what young people should be and become. As Garland (2014, p. 375) argues:

> The principles of breaking down, definition and assessment of what young people are and can do, and the definition of the specific sets of challenges of the future and what to do about them that comprise some forms of education in the 21st century – provide 'a grid of intelligibility' 'for understanding how power operates in our own present-day society'.

Oksala (2016, p. 477) argues that this disaggregation of behaviours and dispositions through disciplinary power/knowledge can enable organisations and institutions to reconstruct them "in new ways that are more productive for the aims of modern industrial societies". The FYA provides examples of disciplinary relations in Australia's neo-liberal education apparatus in this way. The organisation mobilises models and reports which imagine that the capabilities of young people's bodies can be "broken down into narrow segments, analyzed in detail, and recomposed in a maximally effective way" (Oksala, 2016, p. 477). The FYA (2020, p. 32) also mobilises disciplinary knowledges which rearrange and reproduce job clusters and the components of their "multidimensional" concept of "good work". These reports are shaped through disciplinary practices which disaggregate young people's behaviours into manageable parts, disassociate them from localised knowledges of the places or geopolitical contexts in which they live, and disembody them from dimensions of genders and sexualities, class, disability, neurodiversity, ethnic, and racial background, place, culture or social context (Farrugia, 2015, p. 610; Noonan & Kelly, 2019, pp. 481–498).

The employability skills discourses that were established and enacted through the *Finn*, *Mayer* and *Carmichael* reports, are a part of this history of ways of knowing young people. Jill Blackmore (1992, pp. 355–356) argues that these universally applicable constructions of skills, readily become void of sociality and context. In commenting on the emergence of the *Finn, Mayer and Carmichael* reports' framing of employability skills and competencies, Blackmore (1992, pp. 355–356) asserts that skills need to be understood differently according to "how the skills are acquired (training/experience), who possesses the skills (male/female, adult/youth) and in what context these skills are used (public/private)". Blackmore (1992, pp. 355–356) also observes that skill was rarely discussed in relation to unpaid work, or in relation to those behaviours acquired outside of institutionalised, formal training

environments, such as in the home, through lived experiences, in communities and cultural knowledges.

Instead of situating knowledges of skills in social and cultural contexts, in places and bodies, disciplinary knowledge seeks to break down human behaviour into discrete, finite elements in order to know and regulate individuals as productive in neo-liberal governmentalities. Such processes enable "the progressive objectification and ever more subtle partitioning of individual behaviour" (Foucault, 1977b, p. 173) informed by the forms of expertise that define that knowledge.

In *An Interview with Foucault* in *Technologies of the Self*, Foucault (1988a, pp. 14–15) argues that through "psychological, medical, penitential, educational" practices a "normative, self evident" sense of a shared "humanity" had emerged. Foucault contends, however, that the reality of being human is far from a universal experience. Disciplinary knowledge is visited on the body so that the body can become governable in relation to generic and universal behaviours, dispositions, and skills. As my description and analysis of the FYA's *New Work Order* series reveals, disciplinary power/knowledges which break down, disassociate and disembody, make it possible to know and govern young people as productive, docile individuals in Australia's neo-liberal education apparatus. These disciplinary power/knowledge/subject relations enable young people to be made knowable as needing to be educated to become enterprising subjects in neo-liberal capitalist economies.

Individualisation, Normalisation and Expertise

Since the 1950s, various agencies, authorities and centres in emerging Australian education apparatuses have produced and drawn on elements of the psych-disciplines and expertise. Among many influences on the formation of schooling in the 20th century, these elements include developmental and education psychology, pedagogies, and models of human

development as dominant ways of defining, measuring and standardising the behaviours of young people, adolescents and children. Leveraging these mechanisms, Australia's neo-liberal education apparatus has, since the 1980s, amplified the relationships between young people and work through market logics of productivity and growth. The disciplinary practices of individualisation, surveillance, examination, training and normalisation were already well established in schooling, training and work in earlier education apparatuses (Foucault, 1977b). Historically, educational psychology has been central to these efforts to break down, to know and to correct the behaviours of the "mal-" and/or "well-adjusted" (Faye, 1998) young people through pedagogy, assessment and character definition in order to produce particular forms of self-governance and docility (Foucault, 1977b). In his chapter "The Gaze of the Psychologist" in *Governing the Soul*, Nikolas Rose (1989, p. 132) argues that these psych-knowledge practices are significant because they "stake a claim in the disciplining of the uniqueness and idiosyncrasies of childhood, individualising children by categorising them, calibrating their aptitudes, inscribing their peculiarities in an ordered form, managing their variability conceptually, and governing it practically".

Esther Faye (1998, p. 347) discusses how, in the 1950s, psychology branches in Victoria's Education Department were established in order to develop strategies for implementing these ideas about developing the behaviours of the individual adolescent, through pedagogy, assessment and character definition. Faye (1998, p. 347) describes how the development of these psych-disciplinary knowledges in education were informed by the national vision of social and economic reconstruction at that time, with the view that education should produce a "well-adjusted, normal" subject. Faye (1998, p. 347) argues that educationalists and psychologists (in particular, the "Psychology and Guidance Branch" in Victoria's Education Department) "made it increasingly difficult for young people to be thought of as anything other than schoolchildren". The contingency here is that the contemporary promise of

enterprise skills development amidst uncertain futures and precarious labour markets, is able to gain authority as it leverages the disciplinary power/knowledge practices of an earlier education apparatus. There are traces of these developmental notions of adolescence, youth and young people at play in Australia's neo-liberal education apparatus. For example, as the idealised figure of the enterprising (and aspirational) young person is positioned as the norm in relation to which the individual should align their behaviours and dispositions.

One consequence of universal, standardised, developmental frameworks of young people's behaviours is that dimensions of difference and diversity such as those shaped and produced by genders and sexualities, class, disability, neurodiversity, ethnic, and racial background, place or geography, culture or social context, can be understood as being unimportant and or insignificant in processes of being and becoming enterprising. In this sense, educational psych-disciplinary power/knowledges can be understood as enabling organisations such as the FYA to "disembody, reduce and simplify" the complexities of young people's lives through discourses of enterprise. The OECD (2018, p. 6), as I discuss in the following chapter, also leverage disciplinary knowledges about the "plasticity" of student brains during "adolescence" as a way of making truth claims about the normal "development" of young people's "self-regulation" in/for uncertain futures. The OECD (2018, p. 6) argues that:

> Advances in developmental neuroscience show that a second burst of brain plasticity takes place during adolescence, and that the brain regions and systems that are especially plastic are those implicated in the development of self-regulation. Adolescence can now be seen as a time not just of vulnerability but of opportunity for developing a sense of responsibility.

The knowledge practices, discourses and language of developmental neuroscience, function as authoritative forms of expertise in the evaluation and regulation of young people's behaviour. The idealised figure of the enterprising subject and discourses of aspirational misalignment gain meaning and authority as they leverage psych-disciplinary knowledge

practices of individualisation, surveillance, examination, training and normalisation (Foucault, 1977b). The disaggregated models of young people's behaviours produced in these fields of expertise, are visited on young people through technologies of normalisation and individualisation. The individual who is unable to be and/or become the enterprising, resilient, optimistic, aspirational and creative subject, is made knowable as one who "lacks" an entrepreneurial spirit, resilience, optimism, aspiration and creativity. The production of this binary opposition speaks to the legacies of an education apparatus which has made young people knowable and governable in terms such as the well- or mal-adjusted, the normal and the abnormal, and the "at-risk youth".

During the 1980s, the figure of youth at-risk emerged in governmental programs and policies, and gradually replaced discourses of "mal-adjusted", "disaffected", "dangerous", and "delinquent" youth in education (Faye, 1998). Gordon Tait (1995) explains that the category of "at-risk youth" began to underpin understandings of youth administratively and culturally, not as "a stage of life" but as "an artefact of various forms of government". Tait (1995, p. 128) describes how the "graded risk positions" described in documents such as the *Finn Report* (Tait, 1995) signalled that "all students can be 'at-risk' of under- achievement and eventual unemployment". However, he argues that the *Finn Report* represents certain groups as more vulnerable to the consequences of risk outcomes, and that these are the archetypal "at-risk youth". The *Finn Report* played a major role in shaping institutionalised understanding of inequalities and disadvantages among populations of young people based on gender and class in relation to education and employment. According to Tait (1995, p. 123), the introduction of the notion of "risk" increased the "network of governmental intelligibility covering the young".

Tait (1995) cites John Freeland's (1991) statement in "Dislocated transitions: access and participation for disadvantaged young people" which describes the ways in which gender discrimination and disadvantage were brought into conversations about youth in education during the early 90s. Freeland (1991, pp. 177–179) suggests that "not all teenagers experience the same probability of being at risk in the transition to adulthood", but "those most likely to be at risk tend to be members of households and groups experiencing socio-economic and cultural discrimination and disadvantage". In this sense, The *Finn Report* condenses understandings of the role and responsibility of the family as a problem of government in relation to educational engagement, achievement, and disadvantage. Tait (1995, p. 132) argues that the "Students at Risk Program" (1989) claims that parents have "a key influence in changing aspirations and intentions" of young people.

Knowledge production about the political, economic, social and normative markers that characterise stages in the development of young people, enterprise, disadvantage and risk, often belong to particular forms of expertise, not to young people themselves. In "The Dangerousness of Youth-At-Risk: The Possibilities of Surveillance and Intervention in Uncertain Times" Kelly (2000, p. 30) argues that "as an artefact of expertise, youth is principally about becoming; becoming an adult, becoming a citizen, becoming independent, becoming autonomous, becoming mature, becoming responsible", and is connected to a narrative of "transition". Discourses of enterprise skills articulate with the assumptions made through these disciplinary knowledges about young people and their lives, in particular, that young people must develop "the enterprise skills they will need for future work" (FYA, 2015b, p. 3), to identify themselves in terms of "job clusters" (FYA, 2016b, p. 4) and "new work smarts" (FYA, 2017, p. 8).

These histories of problematisation of young people as needing to take individual responsibility for the structural disadvantages that shape their lives are visited on young people in enterprise skills discourses as a silence. The subject who is not enterprising, is not mentioned at all. Governing "structural disadvantages" through discourses of youth "at-risk" and also "risk-taking" are problematic, Threadgold (2020 p. 696) claims, as they "morph" structural problems into "individual deficits and pathologies". Discourses such as those mobilised by non-government organisations such as the FYA during 2015–2020, are examples of the ways in which, in Australia's neo-liberal education apparatus, young people are made knowable as needing to become enterprising in ways which imagine that all young people, in all places, share equal access and engagement to resources, networks, ideas and opportunities. This idealised figure of enterprising young people, with no gender, class, race, ethnicity, disability, or place is made "visible" in ways which conceal the data that has informed the construction of this figure.

Instruments of Data Measurement and Visualisation

Young people's enterprise skills also gain authority as they are visualised and become fluid signifiers, that circulate and are reproduced throughout diverse relationships and elements of this apparatus. Technologies of visualisation are not only key mechanisms employed by third sector organisations such as the FYA, but also by businesses and NGOs such as the OECD, and WEF on a global scale. The graphic visualisation of data makes for aesthetically simple, easily transportable and replicable representations of individual behaviours, skills, dispositions and character qualities. The WEF's twenty-first century skills model (Figure 3.2, first produced in the Prelude as Figure P.1) is one such example.

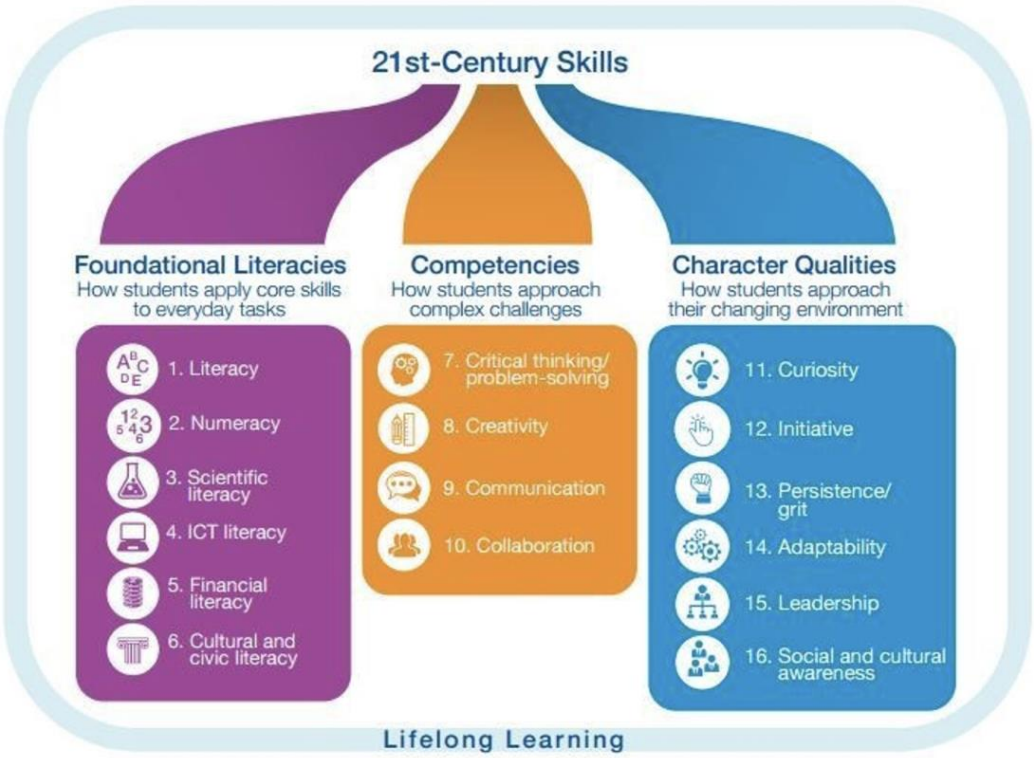


Figure 3.2 Twenty-first Century Skills (WEF, 2015, p. 1)

This model is the product of a collaboration with Boston Consulting Group, first produced in a series titled *New Vision for Education: Unlocking the Potential of Technology* (WEF, 2015). What is important to this present discussion, is where this data comes from, and the ways in which that research is hidden from view. The WEF's model is also important to this discussion, because its elements have been reproduced through the FYA's enterprise skills model, and both organisations (and many others, including the OECD), mobilise these kinds of knowledges, and reference one another's work. At this point it is important to provide further background to the ways in which the WEF's twenty-first century skills model was produced. The WEF states that the 16 skills listed in the model were identified through review of academic research literature, and a wider study of nearly 100 countries. The WEF (2015, p. 3) seek to identify, define and measure inequalities and "gaps" between individuals and populations, across "developing" and "developed" nations, in terms of this model of 16

twenty-first century skills. However, they suggest there is "little consistency" in the "definition and measurement" of twenty-first century skills, especially among "competencies and character qualities" due to a lack in "comparable indicators" for "measuring progress globally".

The WEF (2015, p. 3) argues that the work to be done lies where measures of competencies and character are not sufficient, and where skills (particularly creativity, initiative and leadership) are perceived to be influenced by "cultural factors". For seven of the ten competency and character-based skills, the WEF "were unable to make any comparisons due to the absence of comparable data at scale" (WEF, 2015, p. 3). The WEF (2015, p. 3) set out the work that needs to be done in terms of defining, standardising and measuring these skills:

> Much more needs to be done to align indicators, ensure greater global coverage for key skills, establish clear baselines for performance integrated with existing local assessments, standardise the definition and measurement of higher-order skills across cultures and develop assessments directed specifically towards competencies and character qualities.

Like the FYA, the WEF's twenty-first century skills assume a universally applicable model of human behaviour in relation to education and the demands of labour markets. These visualisations work in relation to disciplinary practices of breaking down, disassociating and disembodying knowledge of behaviour, and developmental logics of psych-disciplinary expertise. In order to define specific twenty-first century skills, the WEF reference a number of sources including the European Skills/Competencies Qualifications and Occupations (ESCO) *Skills Hierarchy for Transversal Skills* (ESCO, 2020). The WEF also cites a model for twenty-first century skills and education that has been around since the early 2000s; The Partnership for twenty-first Century Learning (P21) *Framework for twenty-first Century Learning* (Battelle for Kids, 2016). P21 are recognised as the "champions" of the 4Cs (critical thinking, communication, collaboration, and creativity), and merged with Battelle for Kids in

2018. The Batelle for Kids (Batelle for Kids, 2016, n.p.) remit speaks to the previous roles of P21 in so far as it:

> Innovates and partners with its networks, association and business partners, and school system leaders to design and implement educational experiences that prepare all students to become lifelong learners and contributors in an ever-changing world.

Other resources used by the WEF to identify and define the elements of the twenty-first century skills model include research from the Centre for Universal Education at the Brookings Institution and UNESCO Institute for Statistics (2013), Assessment and Teaching of twenty-first century skills headquartered at the University of Melbourne (AT21CS), WorldSkills, the Iowa Dept of Education's twenty-first Century Skills, and Tony Wagner's model of "Seven Survival Skills". Much of the research used to identify and define twenty-first century skills (such as critical and creative thinking and other social emotional skills) emerge from NGO projects in partnerships with tech-industry organisations. These definitions foreshadow the challenges found by the WEF (2015, p. 24) in measuring these skills:

> Measurement challenges are amplified when it comes to competencies and character qualities. PISA has pioneered the assessment of problem-solving, a key competency. This assessment still covers only approximately 44 countries. For creativity, communication and collaboration, no direct measurements exist to date. For creativity, we used a proxy from one of the sub-scores in PISA's mathematics assessment. We encountered difficulties finding metrics that measure character qualities, with the exception of curiosity. For that metric, we used PISA's problem-solving subscale.

Diverse populations of young people, their families, communities and schools are not considered as stakeholders in the production of these discourses and tools. For example, tech-industry and psych-disciplinary knowledges were used to produce definitions of "curiosity". The WEF also draws on PISA measures of a national and global "innovation index", PISA mathematics subscores, and "Creative Class Share" as indicators of "creativity" (WEF, 2015,

p. 24). The "character qualities" of "persistence and GRIT" and "initiative" are measured through entrepreneurial activities and "self-reported" measures in PISA questionnaires.[31]

The WEF have drawn on twenty-first century skills, competency and character definitions, and produced global comparisons of national skills-bases, against levels of disadvantage, gaps and emerging issues across 91 countries. The "context matters" section of the report states that "fundamental economic and social problems, such as poverty, conflict, poor health and gender discrimination" are macro-level issues underlying these skills gaps. The report identifies four "educational factors" that are understood as significant "deficiencies" among low-income nations (WEF, 2015, p. 5):

> Policy enablers: Standards that govern K-12 education
> Human capital: Teacher quality, training and expertise
> Financial resources: The importance of education in public budgets
> Technological infrastructure: Access to new digital tools and content via the internet.

The WEF's model of twenty-first century skills (Figures P.1 & 3.1), the OECD's transformative competencies and the data that informs them, include many examples of how visualisation functions as a key, productive, disciplinary mechanism in a neo-liberal education apparatus in Australia. Such images appear as coherent and aesthetically logical endpoints to the problems of what young people should be and become in relation to uncertain futures, and they are important elements to consider alongside the production of these discourses. They share many similarities with the FYA's model of transferable, enterprise skills discussed in this chapter.

[31] This inclusion of "character qualities" in skills models, Wheelan et al. (2022, pp. 8-9) argue, "reflects the colonisation of all aspects of our lives, including who we are, our inner selves, what we believe and how we behave".

In both the WEF and FYA cases, the images produced are significant because they impose an order on human behaviour and define their limits and possibilities. The visualisation of disaggregated, disassociated, and disembodied skills through the production of figures, images and tables enable the production of a "rational classification" of young people's behaviours so that the idealised subject can be more efficiently understood, and as a strategy to cover, organise and master the "multiple" so that it can be made productive (Foucault 1977b, p. 148). These images enable the disaggregated, universalised, individualised and normalised figure of the enterprising subject to gain authority, truth and validity in different educational and corporate and contexts. Importantly, the relative "simplicity" of these visualisations enable them to be circulated and reproduced at various sites, by various other organisations, schools and businesses.

Particular disciplinary knowledge practices including data gathering, production, and visualisation, are key elements which enable representations of young people, education and futures in Australia's neo-liberal education apparatus. For example, *The Future of Jobs Report* (WEF, 2016, p. 5), discussed in greater detail in Chapter Five, draws on survey data with chief human resource officers from 371 companies to define the "the future of jobs and the pace of change to the global employment landscape". The FYA also reference strategy and economic advisory business AlphaBeta, to deliver the *New Work Order* research series and their own 2015 report *The Automation Advantage* (AlphaBeta, 2015). Shane Duggan (2019, pp. 124–125) describes the alliances at play in similar systems of definition, measurement and visualisation as "a local and global politics whereby small numbers of elites, often consultants from faraway places, make decisions that have very localised effects on the types of access people have with educational practice".

This small number of key organisations within Australia's neo-liberal education apparatus are able to be influential, in part, because the discourses of skills that they produce are readily circulated and understood in different contexts given their generic nature. In this context, Peter Kelly (2012 p. 944) argues that expert discourses of adolescent brain development, such as the "knowledge practices of the neurosciences and evolutionary and developmental psychology", seek to "disembody, reduce and simplify" the complexities of young people's lives through various forms of representation of "adolescent brain development". Kelly discusses the problem of abstracted, universalised figures of adolescence, through analysis of an interactive graphic with the image title "Inside the Adolescent Brain" on the *Time* magazine website. Kelly (2012, p. 948) argues that the use of "evidence from computed neuroscience and evolutionary and developmental psychology" which are used to produce widely circulated images of brain development, are largely "forgotten". Drawing on the work of John Law (2004), Kelly proposes that this kind of "evidence fades from view" and disappears in "the particular hinterland in which this knowledge is produced and circulates" (Kelly, 2012, p. 948).

Kelly (2012, p. 949) discusses how various scientific knowledge practices, including social, biological and chemical, have their own rules for producing evidence and truth, and "what is true in one paradigm is not necessarily, cannot be, true in another paradigm". Drawing on a discussion of Joseph Dumit's (2004) autoethnographic account of the ways in which PET scan images are produced, circulate and are appropriated, Kelly highlights Dumit's analysis of the "visual effect" of these images and what he calls "fluid signifiers" which "travel readily" and are "easily made meaningful" (Kelly, 2012, p. 950). According to Kelly (2012, p. 952), these images, "work to remove the body and consciousness from the picture (so to speak). They reduce the complexity of human existence, consciousness and relationships to the workings and functions of different regions of one organ in the human body".

Corporate, graphic representations of idealised human behaviours, readily circulate as "fluid signifiers", but in doing so, they erase the socially and culturally situated human body entirely, even though it is the human body that they seek to govern. Haraway (1988, p. 581) argues that such "instruments of visualization" have "compounded these meanings of dis-embodiment", to distance the knowing subject from everything and everyone. Haraway (1988, p. 581) describes how, "like the god-trick, this eye fucks the world to make techno-monsters". Drawing on Haraway's work, Meave Noonan and Peter Kelly (2019) have similarly analysed the ways in which a newspaper magazine in the Victorian regional city of Geelong, the *GT Magazine*, produced and circulated idealised, aestheticised images of the figure of the enterprising young person. Drawing on Law (2004), Noonan and Kelly (2019, pp. 481–498) argue that the characteristics of the figures "made present" in this publication are a hetero-normative version of femininity, "whiteness", and "middle-classness". Linda McDowell (2009, p. 274, cited in Farrugia, et al. 2018, p. 274) also echoes this argument, and states that "in the customer-facing, relationship-focused service industries that are increasingly dominant in advanced industrial societies, the 'idealised white, slim, young, unwrinkled, typically heterosexualised body' is the key figure." In Kelly's (2013, p.15) analysis of the self as enterprise he also observes:

> The self as enterprise does not have a gender, or an ethnic background, or a particular age, or a specific geographic location. Though this may not be entirely accurate. It is possibly more accurate to imagine that gender neutrality assumes masculinity. That no ethnic background assumes 'whiteness'. That no age barrier means a productive, enterprising adulthood that runs from the mid-20s to the mid-40s.

The visualisations of young people's behaviours and skills in Australia's neo-liberal education apparatus are implicated in these disembodied disciplinary power/knowledges. In assuming a universal subject of twenty-first century, enterprise skills discourses, these models work to privilege the dominant subject of psych-scientific discourses. That is, a white,

masculine subject who exists in a cosmopolitan, post-industrial urban geography. It is in this sense that the seemingly mundane, corporate, visualisations of twenty-first century enterprise skills, function as fluid signifiers of an idealised subject in Australia's neo-liberal education apparatus, and make absent the systems, structures and cycles of disadvantage and marginalisation that shape the lives and choices of many young people.

Interlude – Chloe's Story

Chloe's story was first published in a book chapter titled "'Being young', 'living well', in/beyond the pandemic: Exploring the entanglements between COVID-19, the Anthropocene and young people's wellbeing" for an edited collection titled *Wellbeing: Global Policies and Perspectives* (Kelly, Brown & Goring, 2022b). Our intent in that chapter was to discuss some of the health and wellbeing challenges that many young people have faced during the COVID-19 pandemic. We drew on Samantha Frost's (2016) discussion of "biocultural creatures" to consider the entanglement of young people with diverse others, including human and non-human, material and immaterial, and in "biocultural habitats" (Frost, 2016). In this chapter, young people's stories function as both literal, and allegorical narratives as we drew on these concepts in order to think about ways of moving beyond individualised notions of young people's wellbeing.

In developing that argument, we drew on some of the outcomes of a place-based scenario planning project in Melbourne's (Australia) inner northern suburbs that was undertaken in the last half of 2020. The project, titled "COVID-19 Recovery Scenarios for Young People in Melbourne's Inner North", was a collaboration with the Inner Northern Local Learning Employment Network (INLLEN) and its Inner North Youth Employment Taskforce (INYET). As part of that project, we used a video-capture platform (Video Ask) to conduct video interviews with 53 young people during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections during August–November 2020. The project was shaped by a scenario planning methodology and had a future orientation to the year 2025. In that paper we presented the stories of three young people from the midst of Melbourne's second lockdown. In that context, we suggested that these stories were meant to be illustrative and inclusive – but not representative – of some of

the concerns, anxieties, uncertainties, and hopes that young people in Melbourne's inner north gave voice to when we provided them with an opportunity to reflect on and respond to questions about their presents and futures.

——— // ———

Chloe was a self-described "neurodiverse", 16 year old young woman who was completing Year 11 at a state secondary school. Chloe enjoyed school ("for the most part"), doing art, reading, spending time with friends, and riding her bike.

The shift to online learning meant that Chloe struggled to maintain attention on her study. For Chloe and other neurodiverse young people, the challenges of staying engaged, focused and motivated were amplified by this move.

> So, now it's online, and I'm spending a lot more time doing nothing, procrastinating, because I don't have someone to tell me to do it. So that's been a challenge. But an opportunity has been being able to focus on how I learn and kind of get into the nitty-gritty of it, because it's not something that you really focus on in school […] how you personally learn. It's more about covering the bases for the majority. So I was able to gauge a better understanding of myself.

Chloe was confident in speaking about the consequences of the pandemic lockdowns for her learning, and its impact on the development of her own self-awareness.

> I feel like opportunities are opening up for more neurodiverse worlds, which is nice as we kind of realise how ineffective schooling is. Once we turn to it, once we actually have to focus on it as something important going on in society, then it's getting more attention.

In addition to struggling with online learning, her experiences of standardised schooling and assessment systems, Chloe also faced barriers when trying to find work. Chloe brought these past experiences of schooling, and trying to access work, to imagining a pathway to her dream job, and her hopes for her own future:

> Thinking about my future does give me anxiety, but I hope that I'm doing something that I love. I hope that I get to do a job that involves politics or art or being creative.
>
> I want to help people and if I don't do a job that I love and I'm doing some shitty desk job then I hope that I have the opportunity to do things I love outside of work.
>
> I don't know if I want to go to university. I don't really want to go to school.
>
> I hope that the world becomes a more viable place for me to kind of succeed. I don't think that there are enough things stopping people falling through the gaps right now.

Chloe was hopeful about her ability to achieve these things, particularly when "the world's becoming a more fluid and accepting place". However, Chloe was also scared about the future. She was articulate, for example, in outlining her sense of the relations between human food systems, the COVID-19 pandemic, and the climate crisis.

> I've been reading about how there's been a couple close calls in terms of COVID like diseases, and how it's becoming more and more likely that the next disease will come out of factory farming, which contributes to climate change and global warming, which has kind of been put on the back burner by this whole COVID thing. Like this was the year that we really had to become serious about it.

In experiencing these anxieties and uncertainties, Chloe invested her hope in her own generation, particularly in terms of issues, which:

> should have been dealt with. Not this decade, not this century, like it should have been understood when it first came up as an issue.
>
> Here we are in 2020 and the world is on fire. Australia had massive bushfires. Cyclones are going around the world like we've never seen before. And it's only going to get worse unless we do something about it. So I'm hopeful that it will be addressed.
>
> You know, the youth of today will probably be the ones to solve it.

——— // ———

I first connected with Chloe with the support of her public secondary school, which had become a key stakeholder in the "COVID-19 Recovery Scenario's" Project. Chloe's story has enabled me to consider the limits of dominant discourses of enterprise skills discussed in Chapter Three which make knowledges of young people's neurodiversity "manifestly absent"

(Law, 2004). Chloe's story enables us to question what socially just and sustainable models and processes of young people's participation and engagement in education and work might look like if this neurodiversity and other manifestations of "difference" were made "present". In this context, Chloe provides a way for us to consider the entanglement of young people's skills with the embodied dimensions of neurodiversity, and young people's concerns about their futures, food systems, pandemics, bushfires, time-scales, generations, diseases, global networks, and communities. Rather than reproduce universal models of skills and "instruments of visualization" which compound "dis-embodiment" (Haraway, 1991, p. 188), Chloe's story suggests that young people's behaviours, dispositions and skills are complex, messy, and socially and culturally situated. As Jill Blackmore (1992, pp. 355–356) has argued, skill is better understood in terms of "how the skills are acquired (training/experience), who possesses the skills (male/female, adult/youth) and in what context these skills are used (public/private)" as well as "those behaviours acquired outside of institutionalised, formal training environments, such as in the home, through lived experiences, in communities and cultural knowledges".

Chloe's story also opens possibilities for more complex understandings of young people's future orientations. In this context, Leahy et al. (2010) and Threadgold's (2012, p. 26) analysis of young people's "two track thinking" about the future provides a productive framework to read Chloe's story. In this framework, Threadgold (2012, p.26) identifies one track along which young people acknowledge "the critical nature of environmental problems" and, "another track in which people envisage their own personal future and make decisions about their own lives". Threadgold (2012, p. 26) suggests that while some individuals are passionate and active about environmental issues "it is rare that this track of thinking informs the other track where their individual futures in terms of ambitions, their 'narrative of the self' (Giddens 1991), remain fundamentally positive". For Threadgold (2012, p. 26–28), two

track thinking functions more like “a defence mechanism for coping than denial” and that such classification process are “needed by individuals in their ‘quest for order’ in an ambivalent world”. Threadgold (2012, p. 28) suggests that while “there is knowledge and awareness, there is engagement, passion and anger, but action tends to be confined to making reflexive choices in the search for individual ontological security”. In this sense, Chloe’s story provides a starting point to explore the tension between, for example, what Chloe fears for her community including the climate crisis, food systems and pandemics, and the progressive social, cultural and institutional change that she hopes for. As Threadgold (2020, p. 29) suggests, a two track future orientation does not entail the reproduction of “moral panics directed towards young people condemning them for apathy and irresponsibility”. Instead, young people’s two track futures can be understood as “a realistic response to the symbiotic relationship between the poverty of the field of politics and the sensationalist vapidity of its media representation” (Threadgold, 2020, p. 29).

Chapter Four: Being and Becoming an Aspirational Young Person

Introduction

In Australia's neo-liberal education apparatus, organisations such as the FYA, OECD and WEF have become key stakeholders in shaping contemporary problematisations of young people, education and uncertain futures, through discourses of enterprise, aspiration and skills. Chapter Three focuses on the disciplinary micro-technologies and knowledges that give shape to discourses of enterprise and the figure of enterprising young people in this apparatus. This chapter, through analysis of the OECD's discourses of aspiration, discusses how governmental technologies of the self-function within the elements and relations of Australia's neo-liberal education apparatus. In this chapter, I argue that discourses of aspirational subjects produce a moral obligation for young people to "align" with the jobs of the future and imagine time as linear, accelerating and uncertain (Leccardi, 2005; 2012). I suggest that Arjun Appadurai's (2004) concept of the "capacity to aspire", and Rosi Braidotti's (2019) concept of "affirmative ethics" are productive tools to consider different ways of knowing young people's aspirations and future orientations.

The entry point to this analysis of the aspirational subject is a cluster of reports surrounding the OECD's *Dream Jobs? Teenagers' Career Aspirations and the Future of Work* report (Mann et al., 2020a). This report frames young people's aspirations for the future in terms of orientations to the demands of labour markets, precarious work and, in relation to pathways, transitions and jobs (Mann et al., 2020a). I will demonstrate that the OECD's discourses of aspiration, and what it calls "negative misalignment", as well as keywords such as dreams, ambitions and imagination, provide a way of describing the idealised temporalities that young people should develop in a neo-liberal education apparatus in Australia. Through an analysis of these examples, I examine how discourses of aspiration seek to shape relationships between young people and uncertain futures. I develop a series of thematic discussions about

the moral technologies and temporalities that comprise some of the conditions of possibility for these problematisations of young people's being and becoming in relation to the future of work. I argue that market-oriented discourses of young people's future orientation, signal an idealised, dominant mode of self-governance in neo-liberal governmentalities. I also argue that these discourses, forms of selfhood and the temporalities that they seek to enact, are significant elements in this neo-liberal apparatus, because they enable key agencies and organisations to produce a sense of "alignment" between what young people should become, and what these agencies, organisations and labour markets want in/for the present and the future. The final discussion section explores Arjun Appadurai's (2004) work on the "capacity to aspire" as a different and possibly more just way of understanding relations of power/knowledge/subjects amid placed based and global expressions of planetary crises.[32]

The OECD and Young People's Aspirations for the Future

The OECD (2022a, n.p.) is an international organisation that works with governments, policy makers and people to establish "evidence-based international standards" and find solutions to "social, economic and environmental challenges". According to the OECD (2022a, n.p.) website, these challenges include "improving economic performance and creating jobs to fostering strong education and fighting international tax evasion". Education is a key element in the OECD's remit, because it develops international standards and informs policies which aim to help "individuals and nations to identify and develop the knowledge and skills that drive better jobs and better lives, generate prosperity and promote social inclusion" (2022a, n.p.). The OECD was originally formed in the early 1960s as a reformation of the

[32] Elements of this chapter, including analysis of the OECD's *Dream Jobs?* report, are published in a journal article written by myself, Peter Kelly, Seth Brown and Diego Carbajo Pardilla titled "Young People's Presents and Futures, and the Moral Obligation to be Enterprising and Aspirational in Times of Crisis" (Goring, Kelly, Brown & Carbajo, 2023).

Organisation for European Economic Co-operation (OEEC). The OEEC's original purpose, was to "administer American and Canadian aid under the Marshall Plan for the reconstruction of Europe after World War II" (OECD, 2022b, n.p.). The OECD (2022b, n.p.) is an influential organisation in that it advises governments worldwide on policies to "support resilient, inclusive and sustainable growth". It has become a key stakeholder in this neo-liberal education apparatus in Australia, and its research, reporting, policy and modelling on young people, skills, education systems and futures, have been adopted by many education systems across OECD economies. In terms of education, some of the OECD's major contributions include the evaluation of large populations of students in order to compare the performance of education systems across countries, through its Programme for International Student Assessment (PISA).

The PISA is the global education standards and monitoring body of the OECD. PISA is a key mechanism in the administration of evaluations which informs the reporting and development of discourses discussed in this chapter. Every three years, since 2000, PISA (2022b, n.p.) has tested 15-year-old students "to gauge how well the students master key subjects in order to be prepared for real-life situations in the adult world". The knowledge and skills in focus of these tests have emerged to encompass creativity, problem-solving and other enterprise skills. As Rose and Miller (1992, p. 281) argue, programs such as PISA:

> presuppose that the real is programmable, that it is a domain subject to certain determinants, rules, norms and processes that can be acted upon and improved by authorities. They make objects of government thinkable in such a way that their ills appear susceptible to diagnosis, prescription and cure by calculating and normalising intervention.

The results of the tests within this program have become authoritative indicators of a nation's economic competitiveness and growth, the health of education systems, and of the quality and quantity of the human capital that these systems produce. PISA publishes the results of

the test a year after the young people sit these tests. In Australia, results inform the reporting (both academic outputs and in the mainstream media) and comparison of education systems and schools, and the relations between student and school socioeconomic background and achievement.[33] OECD member countries such as Australia have significant investment in the reports and findings of the OECD and PISA, and the report has been referenced by other organisations that work in this space of young people, education, training and employment pathways, and the future of work (see, for example, Chambers' (2020) account for the WEF, and Mistry's (2020) summary for Youth Employment (UK)). Social-emotional skills and capabilities have become a significant focus of PISA's work in the twenty-first century, in which "capabilities now sit side by side with English, maths and science in the eyes of the world's most influential education body" (Lucas & Smith, 2018, p. 1). The OECD and the PISA program are key elements in Australia's neo-liberal education apparatus, and have a major stakeholder share in defining the relations between young people, education, work and futures in Australia and across many other OECD economies.

Over the past five decades, the development and deployment of theories of "human capital" have been central to the OECD's work, and many other global organisations and agencies,

[33] There have been many significant contributions to the literature on PISA from a critical and sociological perspective. In an essay for *Discourse,* Steven Lewis (2014, p. 317) argues that "the OECD and PISA are exerting an unprecedented influence on international education policy-making, both through the sheer volume of nations and economies participating", and the "normative 'PISA effects' (Grek, 2009) that frequently manifest in education bureaucracies following the publication of PISA results". Elsewhere, Lewis and Lingard (2022, p. 91) have also suggested that PISA operates as key mechanism in a form of "networked" and "hierarchical governance" which is "stretched globally" and highlights third party involvement in the work of the OECD, particularly as the test is managed by an "Australian for profit edu-business". Carvalho & Costa (2015, p. 638) have examined the ways in which PISA results and reporting is subject to "reinterpretation, negotiation, and re-contextualization, where national, local, and international agencies intertwine", and Engel and Frizzell (2015) have discussed the "diverse motivations and uses of PISA" at a sub-national level in Canada and the USA. Engel and Frizzell (2015, p. 665) argue that PISA has played a significant role in the "enhanced granularity of international large-scale assessment data to new scales beyond the nation-state", which has caused a deepening of "competitive comparison" in education. In an Australian context, Gorur and Wu (2015, p. 647) argue that PISA's production of "average performance scores" and rankings are "uninformative" and "misleading", even as they give shape to Australia's ambition to be within the "top five" in the Programme for International Student Assessment by 2025.

such as the WEF, and have been significant as a way of expanding relations between education, work, productivity and earnings, skills, young people and social mobility, and young people's orientations to their futures (Marginson, 2019, p. 288). I provide detail of this framework here because it is important to understanding how the OECD has been able to situate such things as "aspiration", "future orientation", "enterprise skills" and "transformative competency" as forms of "human" capital that education systems should develop. In the late 1980s, the trajectories of human capital models of education were a key concern for the OECD in their approach to the problem of youth unemployment. In the report *Employment Outlook 1989*, the OECD (1989, pp. 51–52) acknowledges that:

> There are obvious dangers in relying too much on any one of the theories of the economic significance of education, or in excluding other factors in employment and economic performance. Even in the case of youth unemployment, a problem linked so closely to educational failure […] the limits of education policy's ability to ameliorate labour market problems can be seen clearly. The youth unemployment problem has many dimensions that go beyond education and training solutions. Some of these dimensions may rest on the demand side of the labour market, outside the control of schools and training institutions.

The Centre for Educational Research and Innovation (CERI) is an arm of the OECD's Directorate for Education and Skills which develops projects in areas such as the future of education, innovation in teaching and learning, leveraging knowledge, and measuring progress. CERI (2022, n.p.) seeks to imagine "what futures could look like", as well as to develop and test "new tools and techniques to support better education policies and practices", "new assessment instruments", "approaches to building education system capacity" and "indicators to monitor progress". In 1998, just 10 years after this forewarning about a focus on human capital theory in education policy and practice, in a report titled *Human Capital Investment: An International Comparison* (OECD, 1998, p. 7) the OECD's Centre for Educational Research and Innovation states:

> Investment in human capital is at the heart of strategies in OECD countries to promote economic prosperity, fuller employment, and social cohesion. Individuals, organisations and nations increasingly recognise that high levels of knowledge, skills and competence are essential to their future security and success.

Each chapter in the report from 1998 was structured around the themes of human capital "measurement" of "stock", "investment" and "returns on investment" (OECD, 1998, p. 5). Within this relatively short timeframe, particular notions of what human individuals need to be and become in terms of aspirations, capabilities, skills and competencies, have become taken-for-granted, common sense discourses about the behaviours and future orientations that individuals need in order to navigate the social, political, economic and environmental challenges and uncertainties of the future.

Debates about the role of human capital theory in reforming education systems are now largely silent in the OECD's reports and wider discourses of young people's aspirations for the jobs of the future. That is, despite its influence as a dominant theoretical model which is reproduced through discourses of competency, employability, capability, and transferable, enterprise, and twenty-first century skills. In her PhD thesis titled *The Problem of Youth Unemployment in a De-Industrialising City: A Genealogy of Employability Skills, Innovation and Enterprise*, Meave Noonan (2019) traced some of the key agencies and knowledge flows which reproduce these "human capital" theories as dominant ways of knowing the purposes of education. Citing Marginson (2019, p. 288), Noonan (2019) highlights that "the 1960s' expansion of opportunity and social mobility enabled human capital economists to imagine that the theory was not just necessary in explaining the relationship between higher education and work, it was sufficient". And, "as equality of opportunity and social mobility faltered in many of the advanced capitalist countries" in the late twentieth century, "the explanatory power of human capital theory was nonetheless strengthened" (Marginson, 2019, p. 288).

Drawing on Marginson in her own genealogical analysis, Noonan (2019, p. 175) observes that:

> over the last 30–40 years in industrialised countries such as Australia, young people's engagement in education and training has been redefined narrowly around the need to develop their 'human capital'. Even as 'human capital' has been talked about in different ways at different times. For example, as 'employability skills' from the 1980s onwards, and more recently, as '21st century skills' or 'enterprise skills'.

Noonan (2019, p. 176) argues that organisations which seek to know and govern "problems" of youth, and youth unemployment through discourses of enterprise, "are silent on the specific measures that would be required to allow a range of social groups to participate in this 'entrepreneurial ecosystem' on more equal terms". Echoing the arguments that I have made here, Noonan (2019, p. 177) suggests that the figures mobilised by key organisations such as the FYA (and the OECD and WEF discussed here) function as an "abstraction: this figure is of no particular gender, from no particular class background, and is not encumbered with a physical body". In this sense, the OECD's relative silence on the human capital theories which inform their work is important for understanding how and why universal and individualising abstractions of young people's competency, capability and skills have been produced consistently (albeit through different discourses) since the 1980s in Australia.

The OECD's report *Dream Jobs? Teenagers Career Aspirations and the Future of Work* (Mann et al., 2020a) is a significant example of the ways in which young people's future orientations, their aspirations and dreams have become subject to definition, analysis, measurement and intervention as a desirable form of capital in a neo-liberal education apparatus in Australia. Developed by Anthony Mann, Vanessa Denis, Andreas Schleicher, Hamoon Ekhtiari, Terralynn Forsyth, Elvin Liu and Nick Chambers (2020a), this report examines the results of the 2018 PISA survey of over half a million 15-year old young people in 79 countries. In this survey young people were asked "the occupation in which they expect

to be working at the age of 30 and their plans for further education after leaving secondary schooling" (Mann et al., 2020a, p. 6). The *Dream Jobs?* report and those working papers that relate to it gain authority because of the status of the Programme for International Student Assessment, and the data that it produces. As I will demonstrate, in the OECD's cluster of reports and working papers, aspiration is understood as an individual capability to navigate pathways and transitions through education, training, jobs and work, and to make choices in relation to labour market needs.

The *Dream Jobs?* (Mann et al., 2020a, p. 2) report was produced in partnership with "the Jacobs Foundation (Switzerland), the National Center on Education and the Economy (United States), FutureFit AI (Canada) and the Education and Employers charity (United Kingdom). FutureFit AI are also acknowledged for their analytical contributions to sections focused on "labour market relevance and job realism" (Mann et al., 2020a, p. 2). *Dream Jobs?* begins with a Foreword written by Charles Yidan (Mann et al., 2020a, p. 3), Co-Founder of Tencent (a key NGO partner of the project), who suggests that "schooling is not simply about preparing for work, but we owe it to our young people to ensure that they go through education blind neither to the opportunities offered by the working world nor to its potential pitfalls". The report also includes a summary by Andreas Schleicher (Mann et al., 2020a, p. 8), OECD Director for Education and Skills, titled "Career confusion in the twenty-first century: Challenges and opportunities". This summary proposes that young people's career expectations and aspirations are a problem, particularly among those from disadvantaged backgrounds, and argues that "labour market signals are failing to reach young people" and "disadvantaged young people are at clear risk of career confusion". In Mann et al. (2020a, p. 8) Schleicher states that "young people struggle to develop more informed, more nuanced understandings of the labour market and how they might ultimately engage in it".

The report is structured by a series of chapters, the first of which is titled "Career concentration: Have teenagers' career expectations changed since the start of the century?" including a brief text-based introduction and analysis of PISA results across participating countries. The second chapter is titled "Labour market relevance: How interested are young people in good jobs with a future?" and draws on data from the US bureau of labour statistics and Canadian employment statistics in order to compare "student preferences" with "labour market outlook" (Mann et al., 2020a, p. 25). Chapter Three is titled "Job realism: Are today's teenagers dreaming of jobs that will still be there in 15 years' time?" and compares young people's expectations about future employment with the OECD "Survey of Adult Skills" at the national level across participating countries. This section reports that:

> FutureFit AI analysis shows that outside of the top five or ten jobs, many young people select jobs at much higher risk of automation. In all, 39% of the jobs cited by PISA participants, on average across OECD countries, run the risk of being automated within the next 10 to 15 years (Mann et al., 2020a, p. 27).

Chapter Four, "Career potential: Do teenagers' career expectations reflect their abilities?" draws on PISA data to produce a comparison of the relationship between student "socio-economic status", gender and PISA participants' expectations for tertiary education completion and likelihood of becoming "professionals or managers". The data provided in Chapter Four include specific detail about young Australians in relation to their career aspirations and particular measures of disadvantage. The report states that in Australia, around 27 per cent of high-performing, disadvantaged students surveyed did not expect to complete tertiary education (Mann et al., 2020a, p. 32). Part of the solution to this issue, as it is framed in the report, is that education and schooling should focus on offering "career experiences". In Mann et al. (2020a, p. 3) Yidan states, "good schools will respond by helping young people to become critical thinkers about the labour market and how it relates to their learning" citing the importance of "effective career guidance", and an increased "onus

on employers to step up" to engage with schools and to "help young people understand jobs and careers and help teachers bring learning to life".

Chapters Five, Six and Seven then turn to describe young people in terms of "Career confusion: Do teenagers know what they need to do to fulfil their career expectations?", "Providing guidance: Does career counselling make a difference?" and "Career participation: Who gets career guidance?" (Mann et al., 2020a, pp. 37–51). These final sections of the report emphasise the importance of ensuring that young people understand the changing demands of labour markets, engage in career development activities, and the extent to which they "have access to the information they need to make good decisions about their educational and occupational futures" (Mann et al., 2020a, p. 49).

Dream Jobs? is also framed by a series of "young people's voices", included between each chapter throughout the document. The following quotation comes from Supriya, "a 16-year-old girl from India who hopes to become a psychologist":

> I really think that the purpose of education is lost. We are running after grades, scores and ranks and just cramming, and giving exams with so much pressure. We are not getting experiential learning that will help us build life skills. I believe that students are not only the future, but they are also the present and it is only if they are happy and hopeful in the present that their future will be happy and bright (Mann et al. 2020a, p. 30).

Supriya's concerns are not revisited in the analysis of the data and discussions about young people's aspirations for the future, labour markets, or educational resources and reforms. This additional "data", included, though not expanded throughout the report, are intended to "complement" though does not come from the 2018 PISA survey. Instead, these "qualitative insights" were produced in December 2019:

> as part of events to mark the launch of PISA 2018, young people from around the world wrote letters to Princess Laurentien of the Netherlands. Organised by the London-based charity, Education and Employers, students shared their perspectives

> on how they view their future economic lives and what they anticipate doing to achieve their goals. Students from many countries shared their dreams, and teenagers from China, France and the United Kingdom came to Paris to speak about their hopes and fears for the future. Extracts from the thousands of letters written by young people preface the sections of this report.

Of the seven quotations drawn from these letters, and included in *Dream Jobs?*, Supriya's voice is the only one which includes a somewhat critical perspective of the purposes and promises of her education system. The other six quotations included in the report state an aspiration for a specific career or job, to be financially stable, or as 16-year-old Isobel from the UK is quoted, "to be able to help young people" (Mann et al., 2020a, p. 44). Young people's complex and ambivalent sense of the future, their hopes and fears, that may have been shared in these letters, are not reproduced in *Dream Jobs?*.[34]

In an online seminar that accompanies the *Dream Jobs?* report on the OECD website (OECD, 2020), Schleicher presented on themes such as "high performers with low expectations" and suggested that gender and social background "distort" young people's aspirations for the jobs of the future, and that parents, teachers and schools play a role in shaping stereotypes. Throughout the *Dream Jobs?* report, there are also a number of statements that describe the relationship between social inequality and aspiration, for example

[34] At this point I want to make a reflexive comment about the different ways in which young people's voices and stories have been used in the context of the OECD's *Dream Jobs?*, and throughout this thesis and the projects that have emerged alongside it. The OECD draw on very brief quotations from young people who participated in a project that is outside of the work of the organisation. In addition, they do not outline why the quotations are made present, nor do they treat them as significant to the other data discussed in the report. As I discuss in the Prelude and Coda, young people's stories have been included throughout this thesis, as they provide a "jumping-off point" for exploring "complex social processes related to embodiment", "events, relations, doings, affective resonances, and backgrounds of phenomena" (Coffey, 2022, pp. 71-72). Rosie, Chloe, Michael, Ruth, Ash and Astrid's stories enable me to engage with the "slippery, indistinct, elusive, complex, diffuse, messy" (Law, 2004, p. 6) dimensions and "entanglements" (Haraway, 2016) that give shape to young people's behaviours and dispositions, skills and temporalities. In this thesis, young people's stories illustrate the simultaneously material and discursive, written, embodied, affective dimensions of this "project", and open possibilities to "enliven rather than report" and "to generate possibilities of encounter rather than construct representative ideal types" (Vannini, 2015, p. 15).

in terms of, gender and economic change, and job automation and disadvantage. In *Dream Jobs?* a number of these problems are summarised by Schleicher in the report summary (Mann et al., 2020a, p. 8):

> At a glance, it is clear that it is overwhelmingly jobs with origins in the 20th century or earlier that are most attractive to young people. In many ways, it seems that labour market signals are failing to reach young people: accessible, well-paying jobs with a future do not seem to capture the imagination of teenagers. Many young people, particularly boys and teenagers from the most disadvantaged backgrounds, anticipate pursuing jobs that are at high risk of being automated.

More specifically, the OECD argues that young men from disadvantaged backgrounds are lacking the necessary imagination and aspiration for twenty-first century jobs. The OECD also problematises high achieving young people from disadvantaged backgrounds as failing to aspire to complete university education. These ways of imagining the relationship between disadvantage, careers and careers education, and young people's aspirations are articulated in the first section of the report by Schleicher (Mann et al., 2020a, p. 8):

> Across OECD countries, approximately one in three disadvantaged teenagers who perform well on the PISA tests does not expect to pursue tertiary education or work in a profession to which university education is a common gateway. High achievers do not always aim high. This is a matter of particular concern because high-performing young people from the most disadvantaged backgrounds are, on average, nearly four times less likely to hold high aspirations than similarly performing peers from the most privileged social backgrounds.

In *Dream Jobs?*, the futures of work, labour markets and jobs are described in terms such as an "age of accelerations" (Mann et al., 2020a, p. 3). In these spaces, "young people continue to struggle in the job market" and "governments continue to worry about the mismatch between what societies and economies demand and education systems supply" (Mann et al., 2020a, p. 3). Charles Yidan (Mann et al., 2020a, p. 3) argues that in order to solve this "mismatch", attention must be drawn to "contemporary teenage career expectations, how they are formed, and how they are related to gender, geography and the future of work".

Yidan asserts that “the new generation of citizens requires not just strong academic skills, but also curiosity, imagination, empathy, entrepreneurship and resilience”.

The OECD leverages their own influential programs and reports in framing understandings of aspirations and “school–work transitions”, including *The Future We Want: Future of Education and Skills 2030* (OECD, 2018) report and program, and the “OECD Learning Compass” (2018, p. 5) that is central to it. The OECD Learning Compass identifies three “transformative competencies” including: “creating new value”; “reconciling tensions and dilemmas”; and “taking responsibility”. Together these reveal “how young people can navigate their lives and their world”. These competencies build on the OECD’s (2005, pp. 9–14) *DeSeCo project: Definition and Selection of Competencies,* which identifies “using tools interactively”, “interacting with heterogenous groups” and “acting autonomously”. The OECD’s *Future of Education and Skills 2030* program continues this history of seeking to solve the problem of the future by defining the human capabilities and skills that education systems should produce in order to produce a form of young selfhood that can thrive in the future as it is understood here. These dispositions of value creation, problem solving and responsibility are imagined as the best way for individuals to navigate conditions of uncertainty, disruption and crisis. In this context, it is important to consider how “aspiration” has emerged, and the legacies of human capital theory, that echo in shaping the temporal orientations that are conceived of as having a particular value within these global stakeholder networks.

One example, published in 2020, is the OECD working paper no. 241, titled *Career ready? How schools can better prepare young people for working life in the era of COVID*-19, also written by Anthony Mann, with Vanessa Denis and Chris Percy (Mann et al., 2020b). The paper discusses “how secondary schools can optimise young people’s preparation for adult

employment at a time of extreme labour market turbulence" (Mann et al., 2020b, p. 4). Arguments in the paper include that "variation in career readiness is particularly associated with disadvantage", and that "more effective education systems will ensure schools systematically address inequalities in teenage access to information and support in preparing for working life". The report also draws on PISA survey results to argue that young people's career interests are too concentrated, and that "half of students expressing an aspiration now expect to work in one of ten jobs, a proportion rising to more than 70% in many countries" (Mann et al., 2020b, p. 8).

Mann et al. (2020b, p. 100) argue that young people and schools need an increased focus on "the unprecedented importance of career guidance". Specifically, Mann et al. refer to discussions held at a meeting at the end of 2019, involving six international organisations including the European Centre for the Development of Vocational Training (CEDEFOP), the European Commission, European Training Foundation, the OECD, the International Labour Organisation (ILO) and UNESCO. These organisations are cited as arguing that "as the working world becomes increasingly complex, career guidance is becoming ever more important to individuals, employers and to society" (Mann et al., 2020b, p. 100). Mann et al. (2020b, p. 8) argue that many young people possess "a *distorted* [emphasis added] view of the labour market heavily shaped by social background, gender and migrant status", and "variation in career readiness is particularly associated with disadvantage". The disadvantages and inequalities that shape young people's aspirations for the future are framed as being best addressed through reform to the information and supports that are available to young people through schooling. Secondary schools should "increase capacity to enhance the employment outcomes and career readiness of young people", and "encourage learners to reflect on their aspirations and how they can shape their own futures" (Mann et al., 2020b, pp. 13–14). Mann et al. (2020b, p. 101) argue that young people must shape their futures and

optimise their transitions in “an age of unprecedented post-war uncertainty and instability in the job market”.

The roles and responsibilities of governments in regulating these uncertainties, instabilities and labour markets are made absent by the OECD in the production of this series of reports. The use of the OECD’s own PISA survey data from 2018, signifies a form of self-referential knowledge production which gains authority due to their global status as a reporting mechanism. However, questions such as what occupation young people “expect to be working at the age of 30 and their plans for further education after leaving secondary schooling” (Mann et al., 2020a, p. 6) could be understood as making the complexities, messiness and sociocultural dimensions of young people’s lives absent by design. Detailed discussion of young people’s voices, in different places, are beyond the scope of the PISA survey. They frame the document, but do not inform the analysis of the OECD’s PISA data and discussion. Instead, *Dream Jobs?*, as I discuss in more detail below, mobilises a moral obligation that young people should align their sense of the future, with the education and employment aspirations of a network of business, government, and corporate stakeholders.

Dream Jobs? and the working papers, surveys, policy makers and figures that are connected to this work highlight important issues about the ways in which marginalisation and disadvantage are reproduced, through profoundly different relationships between young people’s “present futures” and “future presents” (Adam, 2010a, p. 362), as I discuss in Part Three. *Dream Jobs?* also highlights the importance of information and knowledge about labour markets, about the futures of work, about the different skills and capabilities, behaviours and dispositions, that enable young people to imagine different futures and trajectories. Drawing on PISA data, the OECD’s *Dream Jobs?* report does important work to highlight some of the resources that can be mobilised in managing the relations between

young people, disadvantage, education and work. In the following section I examine the limits of the relations of power/knowledge/subjects in these discourses, and in the Coda to this thesis I discuss some different relations of power/knowledge/subjects that can help to reimagine the relations between young people and their temporal orientations.

Discussion: Being and Becoming an Aspirational Subject in Australia's Neo-Liberal Education Apparatus

This discussion returns to several key themes that have emerged from this analysis of the OECD and PISA's work on the production of discourses of young people's aspirational misalignment. This discussion focuses on some of the conditions which enable the figure of the aspirational subject to function as a dominant truth in Australia's neo-liberal education apparatus.

This discussion includes three sections, each of which addresses one of the key themes that has emerged from these data. The first section discusses how, in Australia's neo-liberal education apparatus, dominant discourses of aspiration signal the production of a moral obligation for young people to align with the demands of labour markets. I argue that these demands are defined by a complex assemblage of key stakeholders, corporate figures, businesses and non-government organisations which comprise this apparatus, and these elements are implicated in the reproduction of cycles of disadvantage through these discourses. A significant body of work in sociologies of work, education and youth has sought to explore aspects of the ways in which neoliberal capitalism, precarious work, and education and training systems, create demands for young people to develop particular orientations to their futures (Howie & Campbell, 2016; Holdsworth, 2018; Oinonen, 2018; Ikonen & Nikunen, 2019; Walsh & Black, 2020). This section references the work of Robertson (2021), Spohrer (2011) and Walsh (2016), who each provide useful conceptual

tools and contributions to consider the conditions which enable dominant discourses of aspiration to function as a moral technology of government.

The second section of this discussion focuses on the ways in which particular understandings of time, structure dominant ways of knowing young people's being and becoming in Australia's neo-liberal education apparatus. I argue, for example, that the OECD's discourses of aspiration, privilege a linear, accelerating and unidirectional sense of time. Leccardi (2005; 2012) and Walsh's (2016; 2017) work is significant to this discussion, because they offer much for considering the relations between young people's temporal orientations, logics and narratives of acceleration and uncertainty (such as changing worlds of work), and the production of linear discourses of future orientation and aspiration. I argue that these individualising and linear discourses of aspiration, subjugate and silence knowledges of the complex, socio-ecologies which shape young people's capacities to aspire.

In the final section of this discussion, I draw on the work of Arjun Appadurai (2004) and Rosi Braidotti (2019) to engage with some different ways of understanding young people's temporalities and future orientations.[35] Appadurai and Braidotti's work both provide some starting points to rethink the models and theories which are used to structure understandings of young people's aspirations for the future.

[35] There is a substantial field of work in this space across sociologies of youth and education. Including the work of Dan Woodman (2011) (see also, Woodman & Leccardi, 2015). Woodman (2011) has explored how young people's orientations to futures are shaped by significant others, and frameworks such as "social generations" for thinking about change and inequality in young people's lives (See the work of Dan Woodman and Johanna Wyn, 2014). Along with Julia Cook, Woodman (2020, p. 115) has argued that debates over youth and futurity should consider a "holistic approach to the future that is capable of accounting for individuals' embeddedness in both their immediate social relationships and their wider imagined communities". In a similar sense, Kirsty Finn (2017a & 2017b) has explored the relations between young people's pathways and aspirations, gender, class and student mobilities in UK Higher Education. This work is important, but for reasons that I outline in the following discussion, my focus is on the contributions of Robertson (2021), Walsh (2016 & 2017), Leccardi (2005 & 2012), Appadurai (2004) and Braidotti (2019) and others.

The Moral Obligation to Aspire

This section is framed by an engagement with the sociological literature on the relations between young people, labour markets, disadvantage, and different understandings of aspiration. Drawing on this literature, I discuss how, in Australia's neo-liberal education apparatus, young people's orientations to the future are understood in terms of their alignment with the demands of the labour market. Foucault (1987, p. 11) argues that the work that the individual does on themselves in contemporary governmentalities, is carried out in an "active fashion" through practices which are "not something invented by the individual himself [sic]", but instead "they are models that he [sic] finds in his [sic] culture and are proposed, suggested, imposed upon him [sic] by his culture, his [sic] society, and his [sic] social group". In this apparatus, global organisations such as the OECD have become key stakeholders in the reproduction of education discourses which define what young people need to know, be and become in/for the future. The FYA's discourses of enterprise skills, the OECD's transformative competencies, and the WEF's twenty-first century skills work in similar ways. In each case, young people's behaviours and future orientations are understood as a form of human capital that can be shaped in particular ways by key stakeholders, so that they can conduct themselves as individually responsible for the successes and failures associated with developing the right skills and aspirations.

Through frameworks focused on the production of human capital, the OECD want to shape education systems and structures in ways which "invest in subjects who, ideally, should be capable of making choices and accepting responsibilities that align with the moral imperatives of government" (Kelly & Pike, 2017, p. 9). In a neo-liberal version of capitalism those moral imperatives are primarily related to becoming a choice making, responsible and future oriented participant in labour markets. An active participant who can make particular choices and develop particular behaviours according to the relations of power/knowledge/

subjects produced by key agencies and organisations in this education apparatus (Foucault, 1988a, p. 15).

In this context, the OECD aims to improve the alignment of what it identifies as disadvantaged young people with demands defined through a network of corporate elite, businesses, governments and labour markets. Susan Robertson's (2021, p. 167) critique of OECD and PISA global competencies frameworks highlights the "corporate interests" which give shape to these webs and networks. Robertson (2021, p. 167) argues that the "pedagogical impulse" of these networks "is in shaping the culture of the new capitalism, on the one hand, and managing its tendencies to reduce social cohesion, on the other". Robertson (2021, p. 179) suggests that discourses such as global competence and citizenship, and the OECD's concepts, discourses and reports, gain authority due to a "network of actors and agents with different interests, resources and expertise":

> We can now see common connections – both directly and indirectly – to the global economy, corporate interests, and the ongoing place of the US in the face of its declining dominance and capacity to secure hegemony. Asia Society can be seen as a nodal actor, connecting the OECD, élite experts, state departments, and corporate interests, together. Key experts as agents with authority help broker (Reimers), legitimate (Boix Mansilla), and commercialise (EdPlus) the ideas underpinning the model and instrument through the valorising of their expertise and location in élite institutions. Other actors/institutions assist in the circulation and legitimation of this ideational programme, from the American Field Services who helped launch the results of the 2018 PISA global competence, to Arizona State University's EdPlus who have joined the process of commodifying and circulating this brand of global competence in its courses that aligns with the OECD's model.

Mapping these complex and dispersed networks in relation to discourses of global competence, Robertson (2021, p. 179) observes that the OECD leverages connections which "operate in the shadowlands" of "formal structures" and which make "multiple efforts to obfuscate the links between the sources of the idea", "and the sites of influence". Robertson's (2021) argument is important, because it highlights the ways in which truth claims about

young people's future orientations, function because of a large assemblage of corporate stakeholders, that are invested in global education policies, and implicated in shaping Australia's neo-liberal education apparatus. Robertson (2021, p. 179) says that the OECD's "legitimacy is derived from its claim that it is an intergovernmental organisation, and that it is the member countries, and more recently partners, who direct the work" of these organisations. Within these complex networks, young people are rarely provided a stakeholder share in imagining, defining, shaping, voicing their aspirations and sense of the future, beyond jobs and work. Instead, in Australia's neo-liberal education apparatus, to be an aspirational subject, is to practice the freedom to choose the *right* future orientation, as these are defined in the relations of power/knowledge/subjects that are produced by significant Others. These include businesses, key organisations, families, adults, teachers, schools, governments and communities (I discuss how these futures are produced in greater detail in Part Three).

In this sense, neo-liberal government of education is a moral project, and a "moral burdening of the entity at the end of the pipeline" – the young person who should become more aspirational (Brown, 2015, p. 132). The OECD's work provides an example of the ways in which moral propositions, "the said as much as the unsaid" are key elements in this apparatus, and which produce limits and possibilities for the subjects that they seek to govern (Foucault, 1980, p. 194).

These ways of governing young people as needing to align with the demands of labour markets and these global networks, visit increased limits and consequences on the lives of young people from working class and disadvantaged backgrounds. These limits and consequences have been explored in a number of ways in sociologies of young people. For example, Konstanz Spohrer (2011, p. 53) has argued that problematisations of young

people's aspiration construct "young people from disadvantaged backgrounds as deficient", a move that "conflates economic and social equality discourses and individualises structural problems". Spohrer (2011, p. 60) suggests that the discourses which figure young people as having "low aspirations" share parallels with "social inclusion policies that take "excluded" groups as their starting point for interventions, rather than labour market structures". Spohrer (2011, p. 60) maintains that these individualised ways of understanding aspiration are focused on preparing "young people for the responsibility to actively pursue labour market participation at an even earlier stage" (Spohrer, 2011, p. 53). In a similar vein, Zipin et al. (2015, p. 227) re-conceptualise aspiration as a "complex socio-cultural phenomena", in order to problematise the "raising aspiration" policy discourses aimed at "human capital investment and economic competitiveness in so-called 'knowledge economies'" (see also, Spohrer, 2011; Bryant & Ellard, 2015; Duggan, 2017; Walsh, 2016).

In this context, Lucas Walsh (2016, p. 103) describes the complex and fast reaching effects of precarious work and unemployment on young people including "depression, loss of hope, isolation and financial insecurity" and their mental health and wellbeing. Walsh (2016, pp. 107–108) attests that the relationship between young people, futurity, and hope needs to be better understood, beyond the kinds of discourses and forces that are visited on young people's lives as responsibilities to become resilient and to develop other twenty-first century skills, dispositions and aspirations. Walsh (2016, p. 104) proposes the concept of "adversity capital" as a way of troubling the contemporary emphasis on resilience discourse. His development of this concept provides a way of taking account of the "visible disconnect between policy, business expectations and wider trends affecting young people" in which young people's "adaptive and resilient" forms of subjectivity are positioned "as a resource for navigating labour force fluidity" (Walsh, 2016, p. 80). Walsh (2015, p. 90) argues that:

> The term ‘adversity capital’ is deliberately loaded; it suggests that young people should develop personal assets that promote economic mobility in a world in which work is characterised by increasing levels of insecurity. It also promotes an ability to critically move across different cultural, mediated and non-mediated contexts. It signifies that not only will these skills help young people to get a job but also describes them as subjects potentially confronting a life of vulnerability and precarity. It is a form of capital that can be productive of other forms of capital upon which young people can critically confront and navigate precarity and potentially build a better life.

The term “adversity capital” is productive in this context as a way of bringing the neo-liberal imperatives of dominant discourses of aspiration into the foreground. As Walsh (2015, p. 91) suggests, “the notion of adversity capital explicitly seeks to challenge and question forms of domination and prevailing discourses, such as neoliberalism” and to recognise that:

> these policies have been predicated on the idea that young people are themselves expected to reflexively navigate the risks arising throughout contemporary life (Aldenmyr et al. 2012), and to be ‘intelligent, wise, happy, virtuous, healthy, productive, docile, enterprising, fulfilled, self-esteeming, empowered’ (Black & Walsh 2015; Rose 1998, p. 12). Through this individualisation, it is promised that ‘people will be set free from the social forms of industrial society – class, stratification, family, gender status of men and women’ to choose an identity of their own (Beck, 1992, p. 87).

In this context, it may be productive to read the idealised figure of the aspirational subject in Australia’s neo-liberal education apparatus, as a subject of adversity capital. Walsh (2015, p. 99) argues that “practical, systemic responses to workforce fluidity and precarity should be aligned in the best interests of young people”, rather than “divisive” “neoliberal policy trajectories” focused on “the notional separation of lifters and leaners”.

The limits of these deficit models of the aspirational subject in relation to uncertain futures, so evident in the latest OECD work, also became prominent in attempts to govern insecurity in the aftermath of the Global Financial Crisis (GFC) (2008–2009), and the increased precarity across labour markets that young people participate in (Kelly & Pike, 2017; Howie & Campbell, 2016). Julia Cook, David Farrugia, Steven Threadgold and Julia Coffey (2021,

p. 331) argue that the impacts of these crises, amplified during the COVID-19 pandemic from 2020, "play out along pre-existing lines of inequality and marginality, causing the most severe consequences for those who were already most vulnerable to them".[36]

Dream Jobs?, the various reports and working papers that it condenses, and the OECD's work more broadly, highlight important issues in the ways in which social and economic forms of inequality and disadvantage (such as those discussed by Kelly & Pike, 2017; Howie & Campbell, 2016; Cook et al., 2021) are reproduced in neo-liberal governmentalities. Deborah Lupton (2013, pp. 134–135) proposes that discourses which mobilise these moral technologies deflect "attention away from the socioeconomic underpinnings of risk, and divorces misfortune from questions of social justice".

Questions of social justice are being made present by the sociological literature outlined here, and also by young people working with youth studies researchers, to voice their aspirations, hopes, fears and anxieties about the present and the future. These knowledges also signal sites of resistance to the individualising discourses of aspiration which circulate in Australia's neo-liberal education apparatus. For example, in their study, "Young people on the margins: Australian studies of social exclusion" Savelsberg and Martin-Giles (2008, p. 17) work with

[36] Cook, Farrugia, Threadgold and Coffey and others affiliated with the Newcastle Youth Studies Centre, have made numerous, significant contributions to sociological understandings of the relations between young people, labour market participation, gender, race, ethnic, class, and place-based dimensions of disadvantage, inequality and marginalisation. For example, Cook et al. (2022, n.p.) discuss the impact that pandemic-related loss has had on young adults' capacity to plan and argue that understanding planning as "a form of practice through which one's present is connected to their desired future allows for insight into how young people prioritise and address goals in various spheres of life". Sharp et al. (2022) discuss how young people's queer subjectivities are enacted within the hospitality industry, and how disciplinary requirements are negotiated and contested at work. This significant work speaks to some of the sociological knowledges of young people's embodied, affective and place-based experiences of education and work, which are frequently made absent in dominant discourses which seek to govern young people's aspirations and/in relation to the future of work.

young people and their stories to explore the "acute nature of social marginalisation". They argue that:

> the Australian Government's neo-liberal and rigid ('one size fits all') orientation has resulted in policies and services that do not cater for the depth and breadth of social exclusion experienced by many young people, and exacerbate rather than ameliorate social marginalisation.

Savelsberg and Martin-Giles (2008, p. 29) draw two conclusions in their study of deprivation on the lives of young people in Adelaide, South Australia. First, they suggest that "processes of marginalisation and deprivation, best described as unchosen circumstances" have been exacerbated "as a result of socio-economic and policy reforms" producing what they describe as a "vortex" or "cycle of deprivation", "stifling resilience and positive adaptations". Second, they argue that that many "youth policies exacerbate the problems" by "engaging in the 'politics of enforcement'" (Savelsberg & Martin-Giles, 2008, p. 29).

Information about labour markets, about the futures of work, about the different skills and capabilities, behaviours and dispositions that contribute to a person's "employability" are important in enabling young people from diverse and unequal backgrounds to imagine different futures and different trajectories to those futures. However, it is also important to consider how market oriented, individualising and information-focused discourses of aspirational misalignment, are implicated in the reproduction of deficit models of young people's becoming, and of cycles of disadvantage.

The argument here is that there are significant limits to discourses which reproduce moral obligations for young people to align with futures that they have had no voice in shaping. In addition, there is both significant work which critiques these dominant ways of knowing, and significant work on the sociologies of youth which offer more socially just and sustainable

ways of knowing the complex challenges that young people face as they navigate different conditions of inequality, marginalisation, and precarious work in times of crisis.

Acceleration and Linear Time

This section explores the relationship between the forms of uncertainty, precarity and crises produced through global capitalism, and the reinforcement of normative ideas about young people's temporal orientations. I argue that assumptions about the reality status of linear trajectories in uncertain and accelerating time, have enabled discourses of young people's misaligned aspirations, and of their "transitions" in these flows of time, to function as powerful truths in Australia's neo-liberal education apparatus. Linear and accelerating narratives of the future, function as powerful logics in shaping the ways in which young people are made responsible for their successes and failures in relation to education and work. In this space, Mayes et al. (2023, n.p.) have examined the ways in which discourses of "transition", from schooling to education to training to work, youth to adulthood, have been traditionally understood through "developmental" and "step-wise and sequential notions of time". Mayes et al. (2023, n.p.) argue that there is an assumption within fields of education for example, that transitions are "directional and follow an irreversible 'arrow of time'". They summarise some of the sociological literature that has critiqued normative assumptions mobilised through discourses of transitions, for example, an emphasis on "linearity and choice". Mayes et al. (2023, n.p.) argue that "the 'unproblematic norm' of life-stage transitions was formed in the 'work-rich environment' that preceded the changes in economic markets and labour conditions of the 1980s associated with neoliberalism". These assumptions about young people's life stages as a series of linear, unidirectional transitions, bare resemblance to the kinds of logics which structure the OECD's discourses of aspiration, and which enable the concept of "misalignment" to make sense.

Carmen Leccardi (2005; 2012) provides a productive starting point to examine the relations between young people's temporal orientations (both through qualitative research with young people, and in terms of institutionalised discourses) and the production of futures as uncertain and accelerating. Leccardi (2012, p. 63) states that "In linear time the future is considered as a dimension separate from the present and distinct from the past – and, as such, open to control and planning". These arguments offer much for thinking about the limits of linear, progress narratives about young people's temporalities in a "social context characterized by great uncertainty, acceleration and fragmentation" (Leccardi, 2005, p. 123). Importantly, Leccardi (2012, p. 66) contends that contemporary approaches to knowing and governing young people, the present and future, through assumptions of "linearity", an "ideology of progress" and "accelerated innovation" have impacted the association of time "in a structural manner with velocity". This "growth in velocity", Leccardi (2012, p. 66) suggests, "burns up the future in the moment that it is born" and compresses "the temporal space between present and future and rendering it more and more tenuous". Leccardi's work enables consideration of the consequences of linear discourses of aspiration alignment, and the production of the future as an "age of acceleration", uncertainty, precarity and crisis, for young people's experiences and expectations of the present and the future. Leccardi highlights the relations between the shifts and transitions in/from industrial to post-industrial societies, and young people's experiences of time. She argues (Leccardi, 2005, p. 124) that "starting in the post-second world war period in western society", "a future progressive, controllable planned time, for both society and individuals, grew weaker", and this change has been "incorporated into the biographical narratives of young people". In this context, there is work to be done to examine "the mechanisms by which young people today come to terms with the loss of the idea of a future and plan [sic] that is specifically part of the 'second modernity'" (Leccardi, 2005, pp. 124–125).

Adding to this line of thought, the notion of acceleration, what both the OECD and FYA call an "age of acceleration", familiar to neo-liberal discourses of the future (see Mann et al., 2020a, and the FYA *New Work Order* report series) is also important to the logics of time which seek to shape the relations between individuals and their futures (Leccardi, 2005). Leccardi's work provides a way of understanding the ways in which logics and narratives of acceleration and uncertainty, are visited on and affect young people through linear discourses of aspiration. These temporal logics are part of the conditions which enable discourses of aspiration misalignment to function as powerful truths in Australia's neo-liberal education apparatus.

Drawing on Mayes et al. (2023) and Leccardi (2005; 2012), I argue that the problem of young people's aspirations, is also a problem of young people's embodied and affective relations to the possibilities and probabilities of their uncertain, accelerating, precarious presents and futures. As my colleagues and I have argued elsewhere:

> young people's aspiration can be productively re-imagined a complex and ambivalent melange of hopes, despair, anger, optimism, pessimism, wants, and desires that relate to family, peers, relationships, the state of the planet, and so much more. This sense of their futures - what Adam (2010) identifies as an entanglement of *present futures* and *future presents* - exists in tension with the ways in which diverse agencies, such as the OECD, imagine young people's aspirations and a sense of the future (Goring et al. 2023, p. 9).

In the face of the GFC, climate crisis, growing inequalities, the COVID-19 pandemic and other crises, young people's aspirations for the future are understood by organisations such as the OECD, in terms of the relations between young people's expectations for work and jobs, and labour market outlooks and change. As Seth Brown, Scott Phillips and Peter Kelly discuss in their book *Belonging, Identity, Time and Young People's Engagement in the Middle Years of School* (Brown, et al., 2020, p. 100), in neo-liberal forms of capitalism imaginative and productive ways of "colonising" and "commodifying" periods of time to

make it more "efficient", "productive" and "profitable" continue to emerge. Brown et al. (2020, p. 101) suggest that, despite dominant discourses, there is always "some connection to what might be called 'material time'", and that there are complex entanglements between place and the "embodied, networked lives that are lived in a place". Mayes et al. (2023) similarly argue that the concept of transition might be "retheorised" to consider "citizenship, spatiality and relationality", "multiple and intersecting temporal regimes" and to explore "the multiplicity of biographical, spatial, temporal and material *trans*-formations at work in changing times". Key organisations such as the OECD may take account of the possibilities here, for the re-emergence of knowledges of place, culture, temporalities, bodies and networks as critical elements in discussions about young people's hopes and aspirations for their futures, beyond logics of linear and accelerating time which structure neo-liberal discourses of young people's aspirations.

The Capacity to Aspire and Affirmative Ethics

In the final section of this discussion, I engage Arjun Appadurai's (2004) concept of a future oriented, culturally situated "capacity to aspire", and Rosi Braidotti's (2019) concept of "affirmative ethics" to consider different ways of thinking about and complicating the neo-liberal understandings of young people's aspirations and future orientations. There has been significant sociological work that examines the entanglements between young people's temporal orientations, peer and intimate relations, housing opportunities and affordability, socio-cultural and economic markers of transitions to adulthood, and cognitive and affective responses to emerging and novel reconfigurations of time – pasts, presents and futures (see, for example; Woodman, 2011; Woodman & Leccardi, 2015; Cuzzocrea & Mandich, 2016;

Mandich, 2020; Cook, 2017).[37] This work is important, and much of it builds on, and references Appadurai's concept of the capacity to aspire discussed here.

Appadurai's understanding of the "capacity to aspire" seeks to account for the socio-cultural conditions that shape young people's lives, and which might include experiences of precarious work, unemployment, complex and intimately connected hopes, fears and anxieties about the future, and the material resources and conditions that shape young people's capacities to access and engage with education, training and employment. In their OECD working paper *Career ready?*, which directly references and emerges from *Dream Jobs?*, Mann et al. (2020, p. 10) reference Appadurai's work to suggest that young people need to "have access to sufficient information and support", in order to "broaden ambitions", and to "inform self-awareness of what it takes to achieve their aspirations and enable progression towards career goals". Mann et al. (2020, p. 24) argue that Appadurai's work enables them to suggest that "unnecessarily low or confused aspirations" are "a symptom (more than a cause) of inequality". However, in using Appadurai's concept, Mann et al. move from a focus on the social, cultural, and economic ecologies that Appadurai emphasises, to an individualised, informational, market-oriented, deficit understanding of young people's capacity to aspire.

In his original text, *The Capacity to Aspire: Culture and the Terms of Recognition*, Appadurai (2004) argues that we need to shift focus from the individual and their failings in order to understand the production and reproduction of extreme poverty, disadvantage and marginalisation. In order to do this, Appadurai understands culture as a key element in considering the ways in which a person or community's social, cultural and economic

[37] Much of this work is concentrated in the Global North, but also increasingly in the Global South (see, for example, Afroze, 2022; Costaivette, Contreras-González & Palacios-Lopez, 2022; Ngutuku, 2022).

circumstances can produce particular orientations to the future. In this discussion, Appadurai (2004, p. 68) maintains that the capacity to aspire is "not evenly distributed in any society":

> the better off you are (in terms of power, dignity, and material resources), the more likely you are to be conscious of the links between the more and less immediate objects of aspiration. Because the better off, by definition, have a more complex experience of the relation between a wide range of ends and means, because they have a bigger stock of available experiences of the relationship of aspirations and outcomes, because they are in a better position to explore and harvest diverse experiences of exploration and trial, because of their many opportunities to link material goods and immediate opportunities to more general and generic possibilities and options.

In reflecting on the examples from the OECD's work on misalignment, disadvantage and aspirations for jobs, careers and work, the problem that needs fixing shifts from the young person and their future orientations, to an evaluation of the kinds of "power, dignity and material resources" which shape disadvantaged or marginalised young people's capacities (Appadurai, 2004, p. 69). This consideration of young people's differing "capacities to aspire", can unsettle the individualising, market-oriented and deficit models that structure discourses of aspiration in reports such as the OECD's *Dream Jobs?*.

Appadurai (2004, p. 67) suggests that "aspirations" are "never simply individual" and instead "form parts of wider ethical and metaphysical ideas which derive from cultural norms" and are "always formed in interaction and in the thick of social life" (Appadurai, 2004, p. 67). The figure of the aspirational young person is indeed, one who has developed individual capability and skills, rather than, perhaps, one whose capacity to aspire is situated within and shaped through complex networks and resources in different places. Appadurai's work suggests that we can shift our focus from the aspirations of individual young people who might be disadvantaged or marginalised, and how we might *fix* their misaligned sense of the future, to consider the social and cultural imperatives that shape young people's future orientations in neoliberal capitalist economies in different places.

Building on the work that Appadurai's concept does, Rosi Braidotti's (2019, p. 117) work is also productive for considering different ways of understanding the relations between young people, disadvantage, marginalisation and future orientations. Braidotti (2019, p. 117) situates these provocations about capacities for particular forms of selfhood at a "posthuman convergence", "between the Fourth Industrial Age and the Sixth Extinction, between an advanced knowledge economy, which perpetuates patterns of discrimination and exclusion, and the threat of climate change devastation for both human and non-human entities". In her discussion of what an "affirmative ethics" can offer at this "posthuman convergence", her work presents a radically different way of thinking about the models of time and temporal orientations that can give shape to relations of power/knowledge/subjects. In her discussion, Braidotti argues that an affirmative ethics requires attention to those individuals and communities most heavily impacted at this convergence. Braidotti (2019) echoes Appadurai's (2004, p. 68) argument that capacities to aspire are entangled with "power, dignity and material resources", and suggests that:

> it is becoming painfully clear that the dispossessed and oppressed sections of the world population are missing out on the benefits of the Fourth Industrial Revolution, while they are the most severely hit by the climate change and the Sixth Extinction (Braidotti, 2019, p. 117).

Braidotti (2019, p. 118) describes those knowledges which are subjugated at this convergence including "indigenous knowledge systems", "feminists, queers, otherwise enabled, non-humans or technologically mediated existences" which are the "real-life subjects whose knowledge never made it into any of the official cartographies or genealogies". Rather than reproduce the individualising, market-oriented, and deficit models of young people discussed in this chapter, Braidotti suggests that an "affirmative ethics" which builds "on radical relationality, aiming at empowerment" is needed. For Braidotti (2019, p. 122), "This means

increasing one's ability to relate to multiple others, in a productive and mutually enforcing manner, and creating a community that actualizes this ethical propensity".

Braidotti's (2019, p. 121) discussion of affirmative ethics introduces a way of approaching temporality which accounts for the entanglement of pasts, presents and futures, and emphasises that the "co-construction of affirmative ethics actualizes virtual possibilities in the present". Braidotti (2019, p. 121) suggests that the "multilayered structure of the present" can be considered "as both the record of what we are ceasing to be and the seeds of what we are in the process of becoming". Rather than reproduce individualising discourses of young people's aspirations for the jobs of the future, an affirmative approach involves "creating empowering relations aimed at possible futures", and attempts to "create possible worlds by mobilizing resources that have been left untapped in the present, including our desires and imagination" (2019, p. 121). This involves "overturning negativity" to achieve "freedom through the understanding of the conditions that make us un-free, that is to say through the awareness of our limits, of our oppression" (Braidotti, 2019, p. 125).

In a similar way, in a section of *Posthuman Glossary* titled "Socially Just Pedagogies", Vivienne Bozalek (2018, p. 396) summarises the potential of socially just pedagogies which, drawing on the history of critical or radical pedagogies movements, foreground "the importance of transgressive transformation of the educational project". Citing Braidotti (2013), Bozalek (2018, p. 396) argues that "moving beyond critical deconstruction and critique to alternative enactments of becoming" can provide "the impetus for rethinking learning as a creative and indeterminate process rather than one which has as its objective acquisition fixed bodies of knowledge". Bozalek (2018, p. 396) cites Braidotti's "embodied and embedded" subject as foregrounding the "potentialities and becomings in learning environments, where experimentation in education gives rise to unforeseen but productive

and inventive processes rather than predetermined outcomes". In this sense, aspiration (and critical thinking, resilience, enterprise, creativity) as Bozalek (2018, pp. 396–397) observes, is "not an inherent property of individuals" but is, an "assemblage; a complexity of networks of human and non-human actors".

Post-humanist ontologies such as those found in Bozalek (2018) and Braidotti's (2019) work, offer productive possibilities for reimagining discourses of young people's temporalities and aspirations, and their entanglement with dreams and hopes, fears, anxieties and despair, bodies and places, "formed in interaction and in the thick of social life" (Appadurai, 2004, p. 67). I revisit the possibilities introduced here in the Coda.

Interlude – Ruth's Story

Ruth's story was also first published in a book chapter titled "'Being young', 'living well', in/beyond the pandemic: Exploring the entanglements between COVID-19, the Anthropocene and young people's wellbeing" for an edited collection titled *Wellbeing: Global Policies and Perspectives* (Kelly, Brown & Goring, 2022b).

As I have already indicated, our intent in that chapter was to discuss some of the health and wellbeing challenges that many young people have faced during the COVID-19 pandemic. We drew on Samantha Frost's (2016) discussion of "biocultural creatures" to consider the entanglement of young people with diverse others, including human and non-human, material and immaterial, and in "biocultural habitats" (Frost, 2016). In this chapter, young people's stories function as both literal, and allegorical narratives as we drew on these concepts in order to think about ways of moving beyond individualised notions of young people's wellbeing.

In developing that argument, we drew on some of the outcomes of a place-based scenario planning project in Melbourne's (Australia) inner northern suburbs that was undertaken in the last half of 2020. The project, titled "COVID-19 Recovery Scenarios for Young People in Melbourne's Inner North", was a collaboration with the Inner Northern Local Learning Employment Network (INLLEN) and its Inner North Youth Employment Taskforce (INYET). As part of that project, we used a video-capture platform (Video Ask) to conduct video interviews with 53 young people during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections during August–November 2020. The project was shaped by a scenario planning methodology and had a future orientation to the year 2025. In that paper we presented the stories of three young people from the midst of Melbourne's second lockdown. In that context, we suggested that

these stories were meant to be illustrative and inclusive – but not representative – of some of the concerns, anxieties, uncertainties and hopes that young people in Melbourne's inner north gave voice to when we provided them with an opportunity to reflect on and respond to questions about their presents and futures.

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During 2020, Ruth was a Year 12 student who lived in the inner Melbourne suburb of Fitzroy. In her spare time, she worked as a babysitter and also enjoyed doing "tech" for a local "improvisational theatre" company. Ruth was very close with her mum, dad and her 19 year old brother, and told us that "the bush" was an important part of her life.

> I am a lefty, what you might call a feminist. I believe in First Nations people's rights, and my family are members of the Stolen Generations around Australia, but that's not something I connect to so much because I'm very white. But yeah, it's pretty cool. I'm named after my Aunty Ruth. I have a lot of strong women in my life and I really, really appreciate them.

During the lockdown – when residents were restricted to a 5 km travel radius from their home – Ruth and her brother continued to live in Fitzroy, while her parents took care of their farm in rural Victoria. This was a difficult time for Ruth, who had a particularly strong connection with her mum:

> I am really inspired by my mum. I think she's a beast. I love her so much and I miss her. I haven't seen my parents in about four months, nearly four months now.

During the lockdown the challenges of being physically isolated from her family were compounded for Ruth by family crisis and mental health concerns:

> My uncle took his own life at the start of COVID-19, before it really became a thing, and it was really really difficult not being able to see his son.
>
> It's also been really hard not being able to see my Aunty. Because I love her a lot and she suffers a lot with depression, anxiety and has problems sleeping. So it's been kind of tricky not being able to see her like I normally would.

These interconnected crises affected Ruth's ability to get up in the morning, to start her day and attend school online:

> Obviously I did school from home, but it is quite tricky to stay as motivated as I would in person, and often when it is the colder months, to get out of bed, and have a shower every morning.
>
> And to have breakfast every morning. Not during class, before class.

These challenges had a significant impact on Ruth's mental health:

> I got really sad and really lonely. I turned 18 in isolation, and this year was the first time in years that I would seriously consider suicide again. It scared me a lot.
>
> But I'm okay, and I want to be here. There's nothing more than I want to be alive.

In ways that illustrated her animated engagement with the video interview process, Ruth described some of the things that she had come to learn and appreciate during lockdown:

> I've learnt how to make vegan chocolate chip cookies without a recipe.
>
> I've learnt how to call my mum when I miss her, and how to say, "Hey Mum, I miss you."
>
> I've learned how to watch footy on my own.
>
> And how to be okay with shit not going right.
>
> I think I've also learned when it's okay to stand up to people and tell them "Hey, where's your mask".
>
> I've learnt that my bath does not do very good bubble baths.
>
> I think I've learned a lot about the importance of me pushing myself to do my work, and giving myself a timetable so I can stick to it.
>
> And I *will* stick to it.

The scenario planning process gave young people like Ruth an opportunity to think about the future, their own future, and the hopes and aspirations they had, but also the misgivings and anxieties and uncertainties that they might hold for these futures:

> I hope, *I hope* that Australia has set clear goals to be a hundred percent renewable in the near future.
>
> I hope that Indigenous Australians have more recognition of land rights.

> I hope that my family is happy.

In the But what Ruth *hopes* for, and what she *thinks* the world will look like in 2025 are quite different:

> How do I feel about it? I feel genuinely really scared. It frightens me.
>
> And I think 2025 will look like one of two ways. An irreversible future where we've gone too far with fossil fuels and everything to take a step back. Or, we've taken the step and we're moving towards a better future where we take more care of the planet.

In the futures that she imagined, Ruth cared deeply about, and hoped for, a number of things.

> Dickheads in politics – less of them please.
>
> My family's mental health. The people I love and care about being happy and healthy and still being around.
>
> COVID being managed. Having a vaccine.
>
> Me being able to walk home alone at night without people feeling scared that I'm going to have something happen to you.
>
> I'd like to be in a relationship with someone who makes me really happy. Who treats me in a really genuinely wonderful way. And who brings me joy. And maybe cake as well.
>
> I hope that I will be confident. I hope that I will genuinely like the way my body looks.
>
> I hope that I will have taken up, and given up, and taken up, and given up running and swimming and various competitive exercises with very little sticking to it.
>
> I hope that I'm still doing theatre. I hope I am still doing theatre, please still be doing theatre! Cause you know it makes you happy.

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I first came into contact with Ruth with the support of her secondary school careers education and applied learning teacher and mentor. It was clear from the outset that Ruth had been experiencing significant personal and family crisis, and these crises had intensified amidst the challenges of the COVID-19 pandemic and lockdown. As I have argued in Chapter Four, there are significant limits to knowledges of young people's "aspirations" as being primarily about linear orientations to careers, jobs and uncertain futures of work. Ruth's story speaks to

the complexity of young people's temporalities and capacities to aspire, in times of both personal and global crisis, and in relation to pasts, presents, futures, and communities, families, histories, cultures, and places. Ruth's story has supported my own reflection on the significance of young and old people's affective relations to diverse human and non-human, material and immaterial others, and in the sympoietic (Haraway, 2016, p. 58) emergence of human temporalities and capacities. For Ruth these elements include, for example, the children that she cares for, her friends at school and theatre company, her Aunty Ruth, her uncle, her mum, dad and older brother, the critters, plants and animals that comprise her experience of "the bush", sleep, breakfast, vaccines, political leaders, cats, baths, routines, memories, dreams, and the embodied dimensions of loss, isolation, safety, hope, anxiety and angst.

In her account of her own mental health challenges, the death of her uncle, and isolation from family, Ruth's story highlights the "affective expressions and experiences that constitute an intrinsic part of aspiration formation" (Froerer et al. 2022, p. 180). These include, "the sacrifices and suffering, the hope and optimism, the successes and triumphs, coupled with the fears, anxiety, disappointments and despair that underpin and become manifest – often at one and the same time" as young people make sense of their presents and futures (Froerer et al. 2022, p.180). In this sense, Ruth's story highlights some of the limits of step-wise, linear, developmental understandings of time and young people's "transitions" through time (Leccardi, 2005 & 2012).

When given an opportunity to describe the future that she imagined in five years, Ruth shared various personal and collective responsibilities and aspirations, for safer communities and for planetary health, for supportive relationships, land rights for First Nations people, transitions to renewable energies and for those around her to be happy. As she told us this story, like

many of the young people that spoke with us, Ruth can be understood to navigate the "temporal domain with great agility", "pirouetting and swivelling to face both past and future, twisting and turning in the knowledge realms of perception, memory and anticipation" (Adam, 2010a, p. 362). Ruth's view of the past, present and future is much more slippery and elusive, complex and messy than the neo-liberal figures of aspiration might suggest. In this sense, Ruth also provided us with an affirmative and complex, brave and honest account of a more socially just and sustainable future (Braidotti, 2019).

Part Three: Educating Young People in/for Uncertain Futures

Pasts, Presents and Futures

Part Three of this thesis is concerned with how global organisations such as the OECD, WEF and UN have sought to produce and reproduce discourses of uncertain, flexible, globalised and digitally disrupted futures. These are the kinds of futures for which young people are imagined as needing to be educated to become enterprising and aspirational, and to develop other twenty-first century skills. My overarching argument in this Part is that this apparatus reproduces techno-centric and anthropocentric narratives of the future, and erases knowledges of an intergenerational ethic and a crisis of precarious work for young people.

Part Three analyses how the strategic relations and elements in this apparatus, seek to shape the object (that is, futures) that young people as subjects in this apparatus should orient towards. This Part seeks to unsettle these dominant discourses of futures as they function as key elements in Australia's neo-liberal education apparatus, and to address the project's Third Aim:

> Third Aim: To identify and analyse the relations of power/knowledge/subjects that shape those discourses that suggest that young people need to be educated in relation to the uncertain futures of the Fourth Industrial Revolution and Sustainable Development.

In order to achieve this aim, I trace the emergence of two influential discourses that frame an uncertain future in relation to young people, education, training, and work in Australia's neo-liberal education apparatus. These discourses produce certain truths about the Fourth Industrial Revolution (4IR) and Sustainable Development. Both discourses attempt, as Adam and Groves (2007, p. 1) would suggest, to tell, tame, trade and transform the future in ways that serve the strategic aims and needs of neo-liberal governmentalities. The challenges and changes defined in the *Melbourne Declaration* (MCEETYA, 2008), and the character of the twenty-first century defined in the *Adelaide Declaration* (MCEETYA, 1999), do not explicitly include detail about the 4IR or Sustainable Development; however, the futures

made knowable in these documents are intimately connected to these discourses, and the wider ensemble of elements which produce and reproduce them.

This Introduction briefly outlines some of the sociological work which has been productive for thinking about the reality status of the future, and about the entanglement of pasts, presents and futures.[38] This work has informed the development of the analysis throughout the following two chapters. A key aim of Part Three is to unsettle dominant conceptual arrangements and abstractions of the future of work and the future of the planet. Barbara Adam and Chris Groves (2007, p. 1) argue that in the wider history of "Western" cultures, there are many modes of "telling, taming, trading and transforming" what is "beyond the present". In contemporary industrial capitalist societies, this has become a project "inescapably wedded to innovation and progress" where "standing still means falling behind" (Adam & Groves, 2007, p. 1). Drawing on Barbara Adam's work, John Urry (2016, p. 7) has also argued that futures are produced in "complex systems" and the social sciences should aim to deconstruct any taken-for-granted assumptions around any singular notions of time.

As a starting point for developing a critical analysis of the future, Adam (2010a, p. 362) proposes a distinction between "future presents", "present futures", and "past present futures". These distinctions are useful for considering how particular dimensions of time are made present and absent in the production of futures. The task, Adam (2011, pp. 593–594) argues, is to consider the "reality status" of the future in our work, in order to think beyond the "dispositional, imagined or preferred *present future* [original emphasis]*"*. This means to analyse how knowledge practices and "expertise linked to 'probable', 'possible' and

[38] For the purposes of this Introduction, this includes a particular focus on Adam (2010a; 2011) and Adam and Groves (2007). However, the work of scholars such as Cook (2017), Urry (2016) and Facer (2016; 2019) have also informed the sociological understandings of futures, cited and discussed throughout this thesis.

'preferred futures' coexist in hierarchies and a kind of 'layerdness'". Adam says that we need to engage with the "key structural features in the way futures are lived and enacted" in order to develop more complex understandings of how the future is "produced", and is "in progress". Adam (2010a, pp. 361–362) observes that "daily life is conducted in the temporal domain of open pasts and futures", in which we are "mindful of the lived past while projectively oriented towards the 'not yet'". Adam (2010a, p. 362) suggests that people, young and old, are capable of moving "in this temporal domain with great agility, pirouetting and swivelling to face both past and future, twisting and turning in the knowledge realms of perception, memory and anticipation". This complex and layered sense of the entanglements of pasts, presents and futures is important in framing the arguments that I will develop, in particular Adam's (2011, p. 595) distinction "between *future presents* which we anticipate and *present futures* which we enact [original emphasis]".

Future-making, Adam (2010b, p. 5) argues, "not only send[s] ripples through the entire system across space and time, it also inevitably involves future taking: it prefigures, shapes and forecloses". Such consequences include silencing those generations who will inhabit future presents. Adam maintains that (2010b, p. 5) we need to go beyond "the trusted dualisms of past or present, present or future, local or global, individual or collective". In her view, "only systems thinking can handle these interdependencies and mutual implications and theorize their consequences". Mike Michael (2017, p. 513) similarly argues that we can unsettle and complexify dominant futures discourses through empirical analysis which invites discussion about the:

> closeness/farness of the future; the speed with which we are heading toward those futures; whether we are heading toward the future, or the future is heading toward us; the character of the "we" that is moving toward the future-specific groups, humanity, the biosphere; the certainty with which the future is specified.

These questions about the reality status of the future, and of time–space, velocity and speed, ownership, direction, present futures and future presents, and the "we" in relation to the future, frame the genealogical work in this Part of the thesis.

There are two chapters in this Part. Chapter Five is a genealogical analysis of how the future of the economy and work have emerged as a key element in Australia's neo-liberal education apparatus. I take the World Economic Forum's (WEF) concept of the 4IR and *The Future of Jobs Report* series (2016; 2018; 2020a) as an entry point to discussions about the ways in which the future of work has been produced in the apparatus. In Chapter Five, I argue that these ways of knowing futures are made possible through the subjugation of knowledges such as a crisis of precarious work for young people, and the production of ideological uncertainty in Australia's neo-liberal education apparatus. I also draw on Keri Facer's (2016; 2019) work to describe how futures focused on technical problems are produced so that they can become amenable to technical solutions, technologically driven change, and approaches which focus on the demands of an exclusive, corporate elite. Chapter Six examines some of the governmental work concerned with the future of the planet that has been mobilised in relation to education, through varied definitions of concepts such as Sustainable Development, and Education for Sustainable Development (ESD). The *Incheon Declaration* (UNESCO, 2015a) and the United Nations Sustainable Development Goal 4 (SGD4) provide examples of the ways in which the future of the environment and life on the planet have been imagined in relation to education and young people. In that chapter I argue that an intergenerational approach to education has been discontinued in the historical emergence of discourses of Sustainable Development, and there has been a particular focus on the ontological and epistemological structures of humanism. I end the chapter with a discussion about young people's collective activism through movements such as the School Strikes for Climate (SS4C), which challenge the unsustainable logics and trajectories of neo-liberal capitalism.

Chapter Five: The Future of Work: Educating Young People in/for the Fourth Industrial Revolution

Introduction

This chapter provides a description and analysis of the relations of power/knowledge/subjects that shape discourses that suggest young people should be educated in relation to uncertain futures of work. Tracing the WEF's development of the 4IR concept reveals the production of futures made knowable in terms of the automation of routine labour, globalisation, the increased flexiblisation of work, uncertain and changing labour markets, and digital disruption. The concept of the 4IR has been developed in a cluster of reports titled *The Future of Jobs Report*, produced by the WEF and published in 2016, 2018 and 2020. These reports are clearly connected to and cited in relation to the WEF's twenty-first century skills model, and also connect closely with the figures of enterprising and aspirational young people discussed in previous chapters. This series of reports contain ideas about the kind of workforces, labour market changes, economic and technological concerns likely to impact OECD economies in the coming decades.

As I describe in the following section, discourses of the future produced by the WEF in its official reports on the relations between young people, skills, education and futures (particularly during this period of 2016–2020) focus mostly on the future or work, jobs and careers. Debates about progress toward targets such as the *Paris Agreement* to limit global warming to below 2 degrees Celsius in the context of the climate crisis, the rise of populism, and "stakeholder capitalism" (see *The Davos Manifesto*, WEF, 2020b) have featured at different times. However, some of the most influential voices and discourses shaping education, training and learning in these spaces are represented and foregrounded in *The Future of Jobs Report* series.

In the final discussion sections of this chapter, drawing on these examples, I examine some of the limits and possibilities for the production of these futures in Australia's neo-liberal education apparatus. In the first instance, I argue that these futures are produced as knowable, technical problems to be solved through the development of young people's twenty-first century, enterprise skills and aspirations. I argue that knowledges of the impacts and trajectories of neo-liberal economic deregulation and deindustrialisation, and policies impacting young people as a crisis of precarious work in different places have, largely, been made absent in these discourses.

In addition, I outline work which engages with more complex understandings of forms of "uncertainty", and the "crisis of precarious work" (Cook et al., 2021) for young people in order to examine the roles played by "uncertain futures" in a neo-liberal education apparatus in Australia. This includes the work of Walsh and Black (2022), Berlant (2011) and others. Finally, I revisit Facer (2019) and Robertson's (2019) work (and others) and discuss how in this apparatus the future is produced as a technical problem that is amenable to technical solutions.

Economic and environmental concerns about the future have been reproduced as distinct and unrelated concerns by many global stakeholders in an education apparatus, diluting the call for action on climate change and wealth and class inequalities, and amplifying the need for skills, jobs and growth. There are limits to these ways of knowing futures and educating young people, and there are different relations of power/knowledge/subjects that can contribute to discourses of educating young people for more socially just and sustainable futures, which I revisit in the Coda.

The World Economic Forum (WEF) and the Fourth Industrial Revolution (4IR)

The WEF and *The Future of Jobs Report* series have been chosen as entry points to these discussions for a number of reasons. The WEF has been a key player in the production and reproduction of dominant ways of knowing and governing futures, and the Forum Annual Meetings bring together global politicians, economists, activists and leaders who seek to shape the future of global economies, societies and the planet. The WEF is a key element in the neo-liberal education apparatus that I am working with here, and has formalised, strategic partnerships with organisations such as the OECD and PISA and the FYA. The WEF's conversations and reporting about the future of work, jobs, skills and education are significant to the production and reproduction of the discourses of twenty-first century skills, which it poses as a solution to these cycles of economic and technological change. The WEF (2022a, n.p.) describes itself as an "International Organization for Public-Private Cooperation" which "engages the foremost political, business, cultural and other leaders of society to shape global, regional and industry agendas". Professor Klaus Schwab, the founder and executive chairman of the WEF, established the organisation in 1971 in Geneva, Switzerland. The WEF's activities are, it claims, "shaped by a unique institutional culture founded on the stakeholder theory, which asserts that an organization is accountable to all parts of society" (WEF, 2022a, n.p.). In terms of how it understands education, the WEF's "Education, Skills and Learning" webpage (WEF, 2022b, n.p.) states that its mission is about "Closing the global skills gap":

> The World Economic Forum is committed to helping design education and training systems that enable people to keep pace with rapidly-changing labor markets.
>
> We aim to provide ways for the public and private sectors to collaborate on preparing workers of every age for technological disruption, and to help revamp education and training models in ways that better prepare individuals to be active members of the economy and society.

The WEF's model of the future of work is a significant example of how "present futures" are produced and reproduced in a neo-liberal education apparatus in Australia. The call for enterprising and aspirational young people, twenty-first century skills and transformative competencies, only makes sense because the elements in this apparatus also produce models and discourses of uncertain, precarious, automated, globalised and flexible futures. These futures are made knowable in this apparatus, not only by the WEF, but also through a global network of agencies and through their strategic relationships with other organisations, businesses and governments.

The WEF, in particular the Centre for the Fourth Industrial Revolution, is responsible for research and the socialisation and circulation of concepts such as the Fourth Industrial Revolution (4IR) which have become influential ways of framing the future of work, education and skills in a neo-liberal education apparatus in Australia. The WEF's Centre for the Fourth Industrial Revolution (2022c, n.p.) has emerged as "a hub for global, multi-stakeholder cooperation to develop policy frameworks and advance collaborations that accelerate the benefits of science and technology" in order to "harness the technology revolution". The Centre aims to develop policy frameworks and governance protocols that can help "companies and governments accelerate the benefits of the Fourth Industrial Revolution" (WEF, 2022c, n.p.) across developing and overdeveloped economies. The Fourth Industrial Revolution (4IR) has been an important concept and discourse, informing the work of the WEF in this space. This is partly due to the investment in the concept by key figures such as WEF Founder Klaus Schwab, even if the meaning of this term has taken on different forms and meanings in different times, networks and organisations.

Schwab published his book *The Fourth Industrial Revolution* in 2017 and coined the term to describe the current and emerging economic time period in which an increase in new

technologies was fusing digital, physical and biological worlds, and reshaping the way people "live, work and relate to one another". For Schwab (2017, p. 8), the 4IR was fundamentally different from previous revolutions due to the "fusion" and interaction of technologies from "gene sequencing to nanotechnology, from renewables to quantum computing" across "physical, digital and biological domains". In his work, Schwab (2017, p. 8) acknowledges the unequal distribution of these transformations to economic and social life, when he observes that "The second industrial revolution has yet to be fully experienced by 17% of the world as nearly 1.3 billion people still lack access to electricity". For Schwab (2017, p. 4) "dramatic technological change" can be considered "an invitation to reflect about who we are and how we see the world". With the 4IR concept, Schwab (2017, p. 4) raises questions about the interaction between technologies and human life. He calls for humans to harness the benefits of technological developments, and to examine the social models that these technological developments produce.

The Future of Jobs Report series (WEF, 2016; 2018; 2020a) provides an entry point to identify the ways in which the future of jobs and work have been reproduced in a neo-liberal education apparatus in Australia. *The Future of Jobs Report* series, and the concepts mobilised in the series have had significant influence on the OECD's (2020) work in framing young people's career aspirations, and in shaping the rationalities that produced the FYA's *Future of Work* series. To begin, I provide an overview of the contents of the reports in this series, and the discourses, mechanisms, and practices that structure and emerge in and through them. I signal some of the logics, frameworks, absences, silences and subjugated knowledges throughout this section, but I return to them in greater detail in the discussion sections.

In the Preface to the first edition of *The Future of Jobs Report* (WEF, 2016, p. v) the concept of the 4IR is introduced, as a proposal for how "developments in genetics, artificial intelligence, robotics, nanotechnology, 3D printing and biotechnology" lay the foundation "for a revolution more comprehensive and all-encompassing than anything we have ever seen". The Preface (WEF, 2016, p. v) to the report claims that "smart systems – homes, factories, farms, grids or cities – will help tackle problems ranging from supply chain management to climate change. The rise of the sharing economy will allow people to monetize everything from their empty house to their car". *The Future of Jobs Report* (WEF, 2016, p. 3) maps out the "major drivers of transformation" impacting global industries, job displacement and creation, sharing economies, and skills gaps.[39] As I discuss below, this report draws on survey data from chief human resource officers (CHROs) from 371 companies.

Part One of the report draws on this data to describe "the future of jobs and the pace of change to the global employment landscape up until the year 2020, as anticipated by the CHROs of some of the world's largest employers" (WEF, 2016, p. 5). The report outlines both demographic and socioeconomic drivers of change to work, economies and jobs, as well as technological drivers of change, drawing on the survey data from the CHROs. Respondents to the survey ranked key drivers of change in relation to trends impacting their industries and jobs. These "drivers of change" (WEF, 2016, p. 7) are divided into two categories of "demographic and socio-economic" and "technological". The "changing nature of work" was rated among the top three demographic and socio-economic trends impacting industries over all at 44%, followed by "middle class in emerging markets" at 23 per cent,

[39] O'Brien, Selboe and Hayward (2018, p. 42), in their article *Exploring youth activism on climate change: dutiful, disruptive, and dangerous dissent*, have cautioned about the opportunities of particular models of the "sharing economy". They argue that "what began as a progressive, socially transformative idea" have been co-opted by "venture capital and for-profit platforms".

and “climate change, natural resources” at 22 per cent (WEF, 2016, p. 6). The CHROs who participated were also asked to indicate how these drivers of change had or would be felt in terms of time to impact. The majority of respondents understood the impact of the changing nature of work and flexible work to have been felt already, or would be experienced within the timeframe of 2016–2020 (WEF, 2016, p. 20). “Climate change”, “geopolitical volatility”, “longevity, ageing societies”, “young demographics in emerging markets” and “women’s economic power, aspirations” and “urbanisation” are all seen to have much lesser impact beyond the maximum 2025 time horizon provided to participants (WEF, 2016, p. 6). Most importantly for these discussions, the WEF argues that due to the pace of the disruptions of the 4IR, particularly the “changing nature of work”, training systems and labour market institutions must develop “major new skill sets on a large scale” (WEF, 2016, p. 20). For example, the WEF (2016, p. 22) contends that skills such as “complex problem-solving” would be expected to increase as a core skill across sectors (by 52 per cent in 2020), compared to “less than 1 in 20 jobs (4%) that will have a core requirement for physical abilities such as physical strength or dexterity”.

In the 2016 *Future of Jobs Report*, the WEF demonstrate their clear interest in the promotion and opportunity of an accelerated, augmented, flexible and an uncertain technologically driven future, in which economic concerns were primary. The 4IR concept bought with it a number of key assumptions about the future of jobs and work, including: the opportunities of increasingly flexible work conditions; inevitable accelerating growth; and the mutually beneficial impact of automation of particular kinds of human-executed work, for workers, businesses and labour markets.

The concept of 4IR has changed significantly since conversations about the “Third Industrial Revolution” (3IR) were developed by, for example, Jeremy Rifkin (1995; 2011), and others.

Rifkin, who wrote *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era* (1995) and was an advisor to the European Commission, outlines his Five Pillars for the 3IR in Chapter Two of his book (Rifkin, 2011):

1. shifting to renewable energy;
2. transforming the building stock of every continent into green micro–power plants to collect renewable energies on-site;
3. deploying hydrogen and other storage technologies in every building and throughout the infrastructure to store intermittent energies;
4. using Internet technology to transform the power grid of every continent into an energy internet that acts just like the Internet;
5. transitioning the transport fleet to electric plug-in and fuel cell vehicles that can buy and sell green electricity on a smart, continental, interactive power grid.

The 3IR concept imagined the transition to renewable energy sources as the key feature of technological and economic change needed in the present and the future. This is important, because the 4IR concept, does not regard ecological crisis, or renewable energy transition as drivers of change. Rather, these elements are de-centred, and the technological drivers of the changing nature of work are considered the key factors impacting business for the CHROs surveyed. The discourse of flexible work, as it is understood in the WEF report, appears to be a way for the organisation to address processes of labour market deregulation through neo-liberal economic policy that had been occurring across many OECD economies since the 1980s and 1990s. As discussed in Chapter Two, these changes occurred at the level of federal and state governments in Australia, through the "reconstruction" of education, training and labour market systems, structures and policies during the same time period. These similarities highlight the global relations and networks which inform and structure discourses of flexibility, automation and change within Australia's neo-liberal education apparatus. The *Finn*, *Mayer* and *Carmichael* reports, the *Hobart*, *Adelaide*, *Melbourne* and *Alice Springs*

(Mparntwe) declarations and related reports and curricula, echo the futures produced by the WEF, and the roles and responsibilities of young people, students, teachers and schools in relation to those futures.

Discourses of flexibility and flexible work, central to the 4IR concept, are positioned by the WEF as something inherently good, and offering the individual greater choice, freedom and opportunity to profit and maintain an improved "work/life balance". In *The Future of Jobs* report (WEF, 2016, p. 20), "Changing work environments and flexible working arrangements" are listed as among "the biggest drivers of transformation of business models in many industries" (WEF, 2016, p. 17). The WEF (2016, p. 17) states:

> Telecommuting, co-working spaces, virtual teams, freelancing and online talent platforms are all on the rise, transcending the physical boundaries of the office or factory floor and redefining the boundary between one's job and private life in the process. Modern forms of workers' organization, such as digital freelancers' unions, and updated labour market regulations are beginning to emerge to complement these new organisational models. The challenge for employers, individuals and governments alike is going to be to work out ways and means to ensure that the changing nature of work benefits everyone.

In *The Future of Jobs* (WEF, 2016, p. 30) flexible work was described in terms of the "physical and organizational boundaries" "becoming increasingly blurred" because "organizations are going to have to become significantly more agile in the way they think about managing people's work and about the workforce as a whole. Work is what people do and not where they do it". In an Australian context, by 2020 the FYA (2020, p. 32) acknowledges that:

> Even before COVID-19, risks associated with flexible work were being called out. The OECD had found that in general those engaged in flexible work tended to have lower wages, less employment protection, reduced (or no) access to employer and social benefits, greater exposure to occupational safety and health risks, lower investments in lifelong learning and low bargaining power.

Importantly, there are two particular understandings of "flexibility" combined in this apparatus. These include, understandings of flexibility as both a shift to remote and agile physical work arrangements, and also, an increase in casual and gig work, and individual wage negotiations in exchange for full employment. While combining these particular understandings of flexible work, the WEF do not discuss the responsibilities of businesses and governments for the management of labour market precarity, for delivering a robust welfare system, and for providing security for workers, particularly during times of recession, high unemployment and/or crisis at the global, national or local level. The 2016 WEF *Future of Jobs Report*, for example, only includes one citation regarding worker protection in the gig economy.[40] It is worth noting that this report was published at around the same as the FYA's *New Work Order* series was developed, and there is a clear flow of knowledge across the two organisations. In the FYA's *New Work Mindset* (2016b, p. 6) for example, the WEF's *Future of Jobs* (2016) is cited as a primary source in framing the changing nature of work:

> Compounding the uncertainty is the reality that many jobs of the future don't exist today. The World Economic Forum argues that 'in many industries and countries, the most in-demand occupations or specialties did not exist 10 years ago'. In fact, in Australia, over the past 25 years, we have lost 1 million jobs in manufacturing, administration and labouring but gained more than 1 million jobs in the knowledge and service industries.

Knowledges of the consequences of labour market deregulation through discourses of flexibility, are made absent in both the WEF's representations of the future of work, the work of third sector youth advocacy organisations such as the FYA (during the period from 2015–2019) who referenced the WEF's work during that time.

[40] The reference list to the 2016 report includes, Tyson and Mendonca's (2015) paper "Worker Protection in the Gig Economy"; however, it is not discussed throughout the document.

By the time the 2018 edition of *The Future of Jobs Report* was produced, Klaus Schwab and the WEF were describing the "accelerating" impact of the 4IR on economies, jobs, work and skills. Schwab (WEF, 2018, p. v) called for a better understanding of new technologies, automation and algorithms at this time, to ensure "a future of good work". Such a future, Schwab (WEF, 2018, p. v) argues, would require "bold leadership and an entrepreneurial spirit from businesses and governments, as well as an agile mindset of lifelong learning from employees". In this 2018 edition, Schwab (WEF, 2018, p. v) describes the augmentation of human jobs and work, which is likely to "open up [an] entirely new range of livelihoods for workers".

Schwab (2017 p. v) states that businesses "need to recognize human capital investment as an asset rather than a liability", because, in this way of understanding the 4IR, "there is a virtuous cycle between new technologies and upskilling". The key findings section states that new technologies now enable companies to "reach higher levels of efficiency of production and consumption, expand into new markets, and compete on new products for a global consumer base composed increasingly of digital natives" (Schwab, 2017 p. vii). The WEF seek to produce knowledge about the workforce trends and strategies for the 4IR in order to harness the transformative potential of the digital technology revolution.

Like the 2016 report that preceded it, the data used in the WEF 2018 report, were developed out of survey results from business executives, "principally Chief Human Resources Officers (CHROs) facing the workforce changes afoot in today's enterprises" (WEF, 2018, p. 4). The survey was conducted in 2018 through the WEF's global membership community. In a table (WEF, 2018, p. 6) representing the trends and changes that the group perceived to impact business growth during the (2018–2022) period, it is made clear that young people, and young workers were not considered to be stakeholders in shaping these futures which impact

them. Building on similar work produced in the WEF 2016 report, the trends imagined as negatively impacting business growth up to 2022 include “shifts of mindset among the new generation”, shifts in national and global macroeconomic “growth”, increasing protectionism, and the “effects of climate change” (WEF, 2018, p. 6). The “mindset among the new generation” and protectionism are framed as negative factors from an economic perspective.

Under a heading, “From automation to augmentation” (WEF, 2018, p. 10), the report acknowledges that “Some forecasts project that advances in automation will result in the wholesale replacement of the human workforce”. But the WEF also argues that the kinds of work currently performed by humans is expected to be “augmented by machine and algorithmic labour”, and they make the call for business to develop an “augmentation strategy”. This augmentation strategy is described by the WEF (2018, p. ix) as “the broader horizon of value-creating activities that can be accomplished by human workers, often in complement to technology when they are freed of the need to perform routinized, repetitive tasks and better able to use their distinctively human talents”. The WEF (2018, p. ix) states that workers will need to have the “appropriate skills enabling them to thrive in the workplace of the future and the ability to continue to retrain throughout their lives” in order to “unlock this positive vision”. Indeed, workers will need to take on the responsibility to develop a “mindset of agile working” and to retrain and reskill for “previously unimagined futures” (2018, p. ix). The WEF (2018, p. ix) also notes the need to “update labour policy to match the realities of the Fourth Industrial Revolution”. This last point is not revisited in detail throughout the 2018 report edition. There is no further acknowledgement of the distribution of the need for reskilling and retraining in relation to redundancy of human labour as a result of deregulation and deindustrialisation in particular places and communities, beyond the global regional and national level.

As these knowledges of the future of work gain authority in an education apparatus, discourses of twenty-first century skills also emerge as solutions to the impacts and the inequalities that are produced by these changes. The WEF's (2018, p. vii) view that their "workforce trends and strategies for the 4th Industrial Revolution" set out in the report will enable companies to "reach higher levels of efficiency of production and consumption" might be correct. However, they do not account for the ways in which such "transformations" function along pre-existing lines of inequality, reproduce "patterns of discrimination and exclusion" and make absent the impact of current trajectories of profit and growth on "both human and non-human entities" through the "threat of climate change devastation" (Braidotti, 2019, p. 117). "Class" is made absent in these reports, and where "gaps" in "development" are described, the focus is particularly on the adaptations that individuals from historically disadvantaged backgrounds need to make on themselves (WEF, 2018, p. ix).

The third *Future Of Jobs Report* in this series, published in October 2020, includes research that developed the 4IR concept; however, it takes greater aim at the problems of income inequality, disadvantage, and the risks associated with automation. It is important to note that this report was published in the context of the health and economic shocks associated with the first waves of the COVID-19 pandemic during 2020. The Preface to the 2020 report outlines this new way of framing the problem of the future and the 4IR in the context of the COVID-19 pandemic. The WEF (2020a, p. 3) states that a "bounty of technological innovation which defines our current era can be leveraged to unleash human potential" and that there is a need to "reskill and upskill individuals in unprecedented numbers", to "protect displaced workers from destitution, and to create bespoke maps which orient displaced workers towards the jobs of tomorrow where they will be able to thrive". Schwab (WEF, 2020a, p. 3) (and a member of the managing board, Saadia Zahidi) suggest that efforts to support those impacted by crisis, "lag behind the speed of disruption". Schwab and Zahidi

(WEF, 2020a, p. 3) claim that there is a need for a "Global Reset" to ensure "a socio-economic system that is more fair, sustainable and equitable", and where:

> social mobility is reinvigorated, social cohesion restored, and economic prosperity is compatible with a healthy planet. If this opportunity is missed, we will face lost generations of adults and youth who will be raised into growing inequality, discord and lost potential.

The WEF (2020a, p. 3) notes that "while technology-driven job creation is still expected to outpace job destruction over the next five years, the economic contraction is reducing the rate of growth in the jobs of tomorrow". In this report the WEF (2020a, p. 3) argues for the transition of workers to "more sustainable job opportunities", and the problem of a "healthy planet" also emerges as a concern in understanding the future of work. The executive summary to this report highlights a heightened degree of uncertainty about the future of economies and labour markets, framed by the pandemic-related disruption in 2020, economic cycles, and technology adoption. *The Future of Jobs* (WEF, 2020a, pp. 5–8) states:

> economic globalisation is stalling, social cohesion is being eroded by significant unrest and political polarisation, and an unfolding recession is threatening the livelihoods of those at the lower end of the income spectrum. As a new global recession brought on by the COVID-19 health pandemic impacts economies and labour markets, millions of workers have experienced changes which have profoundly transformed their lives within and beyond work, their well-being and their productivity.

The futures represented in this 2020 report are characterised by a renewed sense of uncertainty and crisis, against the backdrop of an emerging pandemic. The discourse of job destruction paints a particularly bleak picture of the future for populations of young people from historically disadvantaged backgrounds, those marginalised from education, training and work, and those do not have the capacity and resources to reskill and upskill. These new skills, the report claims, are to be found in the "surging demand" for workers in green economy jobs, the data and AI economy, engineering, cloud computing and product

development, as well as care economy jobs and those working in Human Resources (WEF, 2020a, p. 8). The report claims that "economies riddled with inequalities and sluggish with adaptation to the new worlds of work" need a "Great Reset" focused on economic prosperity and social progress through more "good jobs" (WEF, 2020a, p. 8). The WEF (2020a, p. 9) argues that "the changes heralded by the COVID-19 pandemic have compounded the long-term changes already triggered by the Fourth Industrial Revolution, which has, consequently, increased in velocity and depth". Following a detailed analysis of several country- level unemployment rate scenarios, and planned business adaptations in response to economic closures due to the pandemic, the report outlines how a "remote and hybrid workforce" has emerged at the intersection of the 4IR and the COVID-19 pandemic (WEF, 2020a, p. 16).

The report details the disproportionate impact of insecure employment on women in countries such as Australia, Germany and the United States, and also the possibility that "an estimated 88 to 115 million people could fall back into extreme poverty in 2020 as a result of this recession" (WEF, 2020a, p. 19). Section 2 of the 2020 edition of *The Future of Jobs Report*, addresses the "Forecasts for Labour Market Evolution in 2020–2025". The WEF (2020, p. 29) estimates that "by 2025 85 million jobs may be displaced by a shift in the division of labour between humans and machines, while 97 million new roles may emerge that are more adapted to the new division of labour between humans, machines and algorithms".

In discussion about the distribution of these disruptions across the labour market, the WEF (2020a, p. 36) suggests that "new skills acquisition" has "bifurcated". This claim is supported by data extracted by online learning provider Coursera. Coursera is the biggest Massive Open Online Course Provider (MOOC) in the world and enables over 5000 online courses to be provided to 97 million customers/students via accredited universities and companies. Drawing on Coursera enrolment data, the WEF (2020a, p. 36) indicate that for those

individuals who were employed during the COVID-19 pandemic, the most common areas of skills development included "mindfulness, meditation, gratitude and kindness". This, the WEF (2020a, p. 36) claim, is in contrast to unemployed individuals, who tended to enrol in learning digital skills, cloud computing and those related to emerging jobs. In developing their analysis of the impacts of the pandemic on labour markets, the WEF (2020a, p. 16) also divides workers into three categories of "essential", "remote" and "displaced" workers. The WEF (2020a, p. 16) argues that "all three types of workers are facing a wholesale shift in working practices, which now require new types of resilience and entail a reskilling or upskilling agenda". The concepts of essential, remote and displaced workers are important in shaping the reconstructed narrative around the future of jobs and work found throughout this report.

The logics which lay the foundation for the 2020 *The Future of Jobs Report* were also evident at the (50th) WEF Annual Meeting in Davos on 20–24 January 2020. 2020 was an important year for the WEF Annual Meeting, because it called for the production of the new *Davos Manifesto 2020* (2020b).[41] This meeting also informed the production of a signed strategic partnership framework between the WEF and the OECD. The WEF general meeting in 2020,

[41] The original *Davos Manifesto* (1973) was a *Code of Ethics for Business Leaders.* In the manifesto the WEF (2020b, n.p.) states the roles and responsibilities of "the management", and states, among other elements: "The purpose of professional management is to serve clients, shareholders, workers and employees, as well as societies, and to harmonize the different interests of the stakeholders". The original *Davos Manifesto* (WEF, 2020b, n.p.) does not refer to corporate responsibilities to/for nature, the planet, climate or environment, however, it outlines the following ethical code of conduct in relation to society:

> 4. The management has to serve society. It must assume the role of a trustee of the material universe for future generations. It has to use the immaterial and material resources at its disposal in an optimal way. It has to continuously expand the frontiers of knowledge in management and technology. It has to guarantee that its enterprise pays appropriate taxes to the community in order to allow the community to fulfil its objectives. The management also has to make its own knowledge and experience available to the community.

was framed by the theme "Stakeholders for a Cohesive and Sustainable World". The objective of this forum, according to the WEF (2020b, n.p.) was to:

> bring together 3,000 participants from around the world, and aim to give concrete meaning to 'stakeholder capitalism', assist governments and international institutions in tracking progress towards the Paris Agreement and the Sustainable Development Goals, and facilitate discussions on technology and trade governance.

With the aim of "stakeholder capitalism" in mind, key speakers at the event included the young Swedish climate activist Greta Thunberg; the Federal Chancellor of Germany Angela Merkel; the UN Undersecretary-General and Executive Director, UN Program on HIV/AIDS (UNAIDS) Winnie Byanyima; the President of the European Central Bank Christine Lagarde; Deepika Padukone, the Founder of the Live Love Laugh Foundation; and Donald Trump, the US president at the time. In relation to Davos 2020, WEF founder Klaus Schwab (WEF, 2019, n.p.) stated:

> People are revolting against the economic 'elites' they believe have betrayed them, and our efforts to keep global warming limited to 1.5°C are falling dangerously short. With the world at such critical crossroads, this year we must develop a 'Davos Manifesto 2020' to reimagine the purpose and scorecards for companies and governments. It is what the World Economic Forum was founded for 50 years ago, and it is what we want to contribute to for the next 50 years.

Following the Annual Meeting in 2020, The *Davos Manifesto 2020: The Universal Purpose of a Company in the Fourth Industrial Revolution* (WEF, 2020b) was produced. *The Davos Manifesto 2020* (WEF, 2020b, n.p.) set the principles designed to guide companies in the age of the 4IR, which includes: that companies consider all stakeholders in sustainable value creation; that "a company is more than an economic unit generating wealth"; that "It fulfils human and societal aspirations as part of the broader social system": and that it exists for "collaborative efforts with other companies and stakeholders to improve the state of the world". Klaus Schwab (WEF, 2020b, n.p.) stated that the new *Davos Manifesto 2022* was designed so that "companies should pay their fair share of taxes, show zero tolerance for

corruption, uphold human rights throughout their global supply chains, and advocate for a competitive level playing field".

The WEF's work during the period from 2016 until 2022 provides examples of the ways in which the elements in Australia's neo-liberal education apparatus function in ways which amplify the voices of corporate stakeholders, while silencing those of workers, unions and young people. The WEF and its research and reports have been significant in shaping the work of other non-government stakeholders in education such as the OECD, and the FYA in Australia's neo-liberal education apparatus. In the sections that follow I discuss some of the relations of power/knowledge/subjects, the silences, absences and discontinuities which have given shape to the emergence of these dominant ways of imagining the future of work. I discuss the limits of discourses of flexibility and the 4IR, and argue that these ways of knowing and governing young people and their futures, are implicated in reproducing patterns of discrimination and exclusion for different populations of young people in different places (Braidotti, 2019, p. 117).

Discussion: Governing the Problem of Young People and the Future of Work in Australia's Neo-Liberal Education Apparatus

This discussion addresses a number of themes that have emerged with this description and analysis of the WEF's 4IR concept and *The Future of Jobs Report* series. The examples described in this chapter provide a way of exploring and explaining how strategic relations and elements are arranged in Australia's neo-liberal education apparatus in order that it can govern the future of work as uncertain, precarious, accelerating, and automated. The WEF and the 4IR play a significant role in Australia's neo-liberal education apparatus by mobilising discourses of the future of work as knowable, technologically enhanced, flexible and uncertain. This discussion includes three sections. First, I discuss how discourses that young people need to be educated in/for the uncertain futures of work, rely on the subjugation

of knowledges about the impacts of processes of neo-liberal economic reform, deregulation, deindustrialisation and precarious work impacting young people along pre-existing lines of inequality in different places. Cook et al. (2021) and Furlong and Kelly (2005) discuss the consequence of these changes, and their relative silence in neo-liberal governmentalities and discourses. Along with this work, I draw on Walsh and Black (2022) to bring some more complex understandings of "uncertainty" into this discussion.

Second, I discuss how these dominant futures of work are mobilised through narratives of an optimised, colonised and contingent future (Facer, 2019, p. 5). I draw on Keri Facer's (2016 & 2019) work to suggest that the WEF and other key organisations in this apparatus, produce, circulate and reproduce futures that are structured by a technocentric approach (to both problems and solutions) and which amplify the voices of an exclusive, corporate elite. Facer's (2019, p. 5) analysis of "narratives of optimisation, colonisation, and contingency" about the future bring complexity to these discussions of how the future is made knowable as uncertain through discourses of 4IR. I revisit these themes in the Coda, and consider what different relations of power/knowledge/subjects can contribute to discourses of young people and uncertain futures.

A Crisis of Precarious Work and Ideological Uncertainty

The WEF mobilises a sense of the future as accelerating, changing, uncertain, and requiring the transformation of individuals, businesses and institutions to reach "higher levels of efficiency of production and consumption" (WEF, 2018, p. v). This section discusses some important work within fields such as the sociologies of youth, education and work, which speaks to the silences, absences and subjugated knowledges in these discourses of the future of work. These include, for example, the impacts of precarious work on youth labour markets

during times of crisis, and the production of cycles of disadvantage for particular populations of young people.

Abstractions such as the WEF's 4IR and related discourses in an education apparatus, claim that "developing economies" and disadvantaged communities and individuals need to develop twenty-first century, enterprise skills and aspirations in the face of an uncertain future of work (WEF, 2018). Instead of addressing the consequences of labour market deregulation, and the possibility of the provision of secure and decent work and wages for young people as they navigate life after education in de- and post-industrial economies, the policy responses of the WEF, and the FYA and the OECD produce a future that is made knowable as uncertain, and which calls for individualised responses focused on optimism, optimisation and opportunity. These dominant discourses are reproduced in relation to significant silences. For example, welfare systems, the roles of unions, the responsibilities of businesses in managing precarious work arrangements, and protections for young workers in times of crisis, are absent in these discussions about the future of work. The responsibilities of businesses and governments for managing workforce transitions and supports during processes of labour market change are also made absent, as are the distributions of economic shock to particular populations of young people, which could be seen in the aftermath of the GFC (Kelly, 2018). Kelly (2018, p. 1292) has discussed the ways in which these inequalities are connected to the tendency, in the neo-liberal version of capitalism, to replace human labour to reduce costs to business and promote efficiency whenever possible. Kelly (2018, p. 1292) argues:

> low-skilled, low paid workers are always vulnerable; the working and middle classes of the first and second Industrial Revolutions may indeed be 'zombies' (Beck 1992, 2000); and the future has to be made/colonised (but by whom, with what purposes, and what consequences?).

These logics and vulnerabilities were made even more visible during the COVID-19 pandemic, when young people, more likely to occupy precarious sectors of the labour market, and informal and casual work arrangements, were impacted by business closures and lockdowns. The WEF's (2020a, p. 16) discourses of up- and -re-skilling across all three categories of "essential", "remote" and "displaced" workers during the pandemic, provides a very limited depiction of the differences between job losses in different places, those who had access to opportunities for remote working, and the risks associated with working in a high-risk, high-contact environment with COVID-19. The disproportionate impact that events such as the recessions of the 1970s, 1990s and late 2010s have had on young workers have been seen again during the COVID-19 pandemic, with the additional dimension in which shutdowns to businesses disproportionately impacted the industries, and the high-risk, high-contact labour markets that young people are more likely to occupy in Australia.

In their discussions about the experiences of hospitality workers during the pandemic, Cook et al. (2021) examine "labour market insecurity, structural inequality and the biographical practices that young people deploy in order to manage uncertainty".[42] Cook et al. (2021, p. 336) describe how the impacts of the pandemic were distributed differently for populations of young workers, including differences across populations of international students, those with family support, and different class backgrounds.[43] Cook et al. (2021, p. 339) argue that:

> the COVID-19 pandemic exacerbated the precarity faced by young hospitality workers precisely as it imposed unique risks of infection and community transmission

[42] The team at the Research Centre for Newcastle Youth Studies have also been doing significant work exploring the relations between class distinctions, affective labour, gender politics, and young people's participation in the urban night-time economy in a gentrified neighbourhood of Melbourne, Australia (Threadgold et al., 2021).

[43] Coffey et al. (2021, p. 1337) also discuss how the vulnerabilities and struggles of young women international students were intensified during COVID-19 pandemic, including "extreme financial precarity", "risk and exploitation", feeling "unwelcome" and "unwanted" and "threats to physical safety and wellbeing".

> via hospitality venues. Workers were at risk of immediate poverty as well as threats to their physical health and that of their families.

Cook et al. (2021, p. 345) also argue that observing the impacts of such crisis on youth labour markets actually highlights "a crisis of precarious work itself". Prior to the COVID-19 pandemic and the GFC, Furlong and Kelly (2005, p. 223) similarly reflected on emerging processes of casualisation across Australian labour markets, and warned that universal understandings of labour market changes, suggest that its impacts are "all pervasive". However, they claim, the greatest impact has been consistently felt by more vulnerable labour market participants, such as young women, those concentrated in "low-skilled occupations", and particular sectors of a service labour market (Furlong & Kelly, 2005, p. 223).

Despite these cycles of disadvantage and the distribution of the impacts to young workers, the WEF and other key organisations in Australia's neo-liberal education apparatus, have continued to focus on an optimistic and universal narrative of the *Future of Work.* As Klaus Schwab (2017, p. v) states, the 4IR is likely to "open up entirely new range of livelihoods for workers", and "a virtuous cycle between new technologies and upskilling". Schwab (2018, p. v) contends that "human capital investment" is understood "as an asset rather than a liability". More than two decades ago Campbell and Brosnan (1999, p. 3) described these changes in terms such as a "far-reaching process of labour market deregulation", which proceeds "primarily through the dismantling of the distinctive system of awards – the main avenue of external, protective regulation in Australia". The implications of flexibility policies for the Australian workforce, they argue, have increased "growth in precarious employment, wage dispersion and the development of a low pay sector amongst full-time employees" as well as "fragmentation of working-time arrangements" (Campbell and Brosnan, 1999, p. 3).

As the examples from the WEF's *The Future of Jobs Report* series show, precarious and insecure work conditions have come to be accepted as the norm in labour markets of

developed economies. An uncertain future of work is reproduced as a taken for granted truth in Australia's neo-liberal education apparatus, and has a significant impact on the production of discourses about what young people should be and become now and for this future. In the same way, a particular narrative of "uncertainty" about the future, has been mobilised as a way of naming and knowing a vast array of problems, changes, challenges and crisis.

Lucas Walsh and Ros Black's work (2019) is very constructive in this space, because they provide some tools and discussions for thinking about how and why forms of "uncertainty" are mobilised in this apparatus. Walsh and Black have developed a significant body of work that explores the ways in which young people understand and navigate their imagined futures and hopes in the current socio-political climate. Their work (Black & Walsh, 2019) draws on young people's voices to present a challenge to reductive educational discourses which encourage young people to produce hopeful and resilient solutions to the uncertainties that shape their lives. Walsh and Black also suggest that young people are positioned within discourses of higher education, as subjects "permanently in 'situational' mode", and who live "in waithood" (Walsh & Black, 2020 p. 499). They use the term "homo promptus" in order to "understand how young university students imagine and move towards imagined futures that may be subject to economic downturns, competitive, mutable labour markets and the uncertainties of the contemporary economy in ways that reflect a kind of permaflexi selfhood" (Walsh & Black, 2020, p. 500).

In another study, Walsh and Black examine the particular character of uncertainty that is inscribed in dominant discourses and visited on young people. They (2022, p. 98) suggest that "uncertainty has its roots in morphing and collapsing economic, political and environmental global systems, which are generated and experienced collectively but the effects of which, and the responsibilities for which, are deeply individualised". Through

analysis of the ways in which young people's hopes for the future may be "supported or undermined by current socio-political climates and by the shifting circumstances of the Anthropocene", Walsh and Black (2022, p. 99) present "three manifestations of uncertainty" that might be important for understanding the ways in which the future of work is made knowable in Australia's neo-liberal education apparatus:

> ordinary uncertainty that arises during the unpredictability of everyday life; extraordinary uncertainty that arises from unusual events such as a pandemic; and ideological uncertainty, according to which uncertainty becomes normalised as a social construct which is productive of labour market precarity.

Here, Walsh and Black (2022, p. 107) observe that some forms of (ideological) uncertainty "can be perpetuated in the interests of the powerful to keep wage levels low". Drawing on Antonio Gramsci's *Prison Notebooks* (1971) they develop this line of thought in relation to the kinds of discourses of the future discussed in this chapter. Walsh and Black (2022, p. 107) suggest that:

> Uncertainty keeps young people busy focusing on the present while forgoing the idea that the future can be actively created. Perhaps more deeply, uncertainty here resembles Gramsci's (1971) notion of cultural power according to which people believe in and consent to the order of ruling elites. Accepting uncertainty as a norm maintains the real power of elites so pervasively that they come to be 'common sense' to all (Gramsci 1971). As the wealth of these elites becomes more concentrated in the hands of a few, wage levels remain stagnant for the many, and the precarity of working life in the gig economy becomes more widespread and normalised; the combination of these suggests that it is in the interests of money and power to promote or perpetuate uncertainty.

Lauren Berlant (2011) describes this production of particular expectations and aspirations and/in conditions of precarity and uncertainty as a kind of "cruel optimism". Cruel optimism, Berlant (2011 p. 1) maintains, is a relation to an "object that draws your attachment" in ways that "actively impedes the aim that brought you to it initially". The production of an uncertain, changing, precarious future of work, produces conditions in which many of the "fantasies" of a "good life" are "fraying" in neo-liberal capitalism. Berlant (2011 p. 3) argues

that these fraying fantasies include “upward mobility, job security, political and social equality, and lively, durable intimacy”, and, significantly, “the sense that liberal-capitalist society will reliably provide opportunities for individuals to carve out relations of reciprocity that seem fair and that foster life as a project of adding up to something and constructing cushions for enjoyment”.

The WEF’s narrative of the future is one example of the ways in which, in Australia’s neo-liberal education apparatus, the production and reproduction of discourses of flexible, accelerating, uncertain futures of work are intimately connected with the reproduction of cycles of disadvantage for many young people. And, as long as the development of young people’s skills and future orientations are understood as technical solutions to the problem of an uncertain future, those labour market participants who are most vulnerable, will continue to confront “ambiguous futures and fewer options for employment or a career” (Howie & Campbell, 2016, p. 906). In Australia’s neo-liberal education apparatus, knowledges of the distribution of insecure work and unemployment for different populations of young people are made absent, including the consequences of “depression, loss of hope, isolation and financial insecurity” that these conditions produce (Walsh, 2016, p. 103).

The Future as a Knowable, Technical Problem

As I demonstrate in this chapter, the WEF’s Centre for the Fourth Industrial Revolution (2022c, n.p.) identifies as “a hub for global, multi-stakeholder cooperation to develop policy frameworks and advance collaborations that accelerate the benefits of science and technology” and to “harness the technology revolution”. This section discusses some additional conditions of possibility for the production of these discourses of the future. The work of global stakeholders such as the WEF, provides examples of the ways in which, in neo-liberal governmentalities, “technofixes” (Haraway, 2016, p. 3) aim to produce a “bounty

of technological innovation which defines our current era can be leveraged to unleash human potential" (WEF, 2020a, p. 3). In Australia's neo-liberal education apparatus, the future is reproduced as a time–space that is disassociated from context, culture, place and disaggregated into universally applicable challenges and changes. Keri Facer's (2016; 2019) work is productive for developing this discussion, and for troubling futures focused on technical problems that are amenable to technical solutions, and approaches which amplify the voices of an exclusive, corporate elite. Facer has (2019, p. 5) developed a distinction between what she identifies as "narratives of optimisation, colonisation, and contingency" about the future. These tools bring complexity to understandings of how the future is made knowable as uncertain through discourses of 4IR. These tools can also highlight the limits of the dominant present futures in Australia's neo-liberal education apparatus, and how particular discourses of the future circulate, gain authority and reality status in this apparatus.

In her analysis and critique, Facer (2019, p. 5) argues that there are "fundamental weaknesses" to narratives that "the future is knowable" (optimisation), or that "the future is an empty space that should be transformed" by students in line with the ideas predetermined by adults (colonisation). Facer also observes these fundamental weaknesses to narratives in which "uncertainty about the future dominates responses to contemporary change". She (2019, pp. 4–5) summarises the limits of these narratives of the future, and the conditions which enable them, particularly the ways in which they are reproduced in/through policies, programs and school-based activities and interventions aimed at young people. Mona Lilja (2018, p. 424) similarly discusses how, through disciplinary practices of contemporary governmentalities, there is a tendency toward the "use of every moment" where the individual "strives towards an ideal point at which one could maintain maximum speed". Facer (2019, p. 4) proposes that when we treat "the future as knowable", it is too readily translated into:

> an educational imperative to ensure that young people are skilled up for an assumed future of technological dominance and neoliberal competition (Facer, 2018). The relationship between child and the future is presented as one of adaptation to a particular inevitable set of events and optimal choices are assumed to be those that will best ensure success in those forecast conditions. The future here is neither open nor subject to serious critical scrutiny.

This is an important consideration when analysing the challenging, changing, uncertain and precarious character inscribed in the futures made present in Australia's neo-liberal education apparatus, through the *Adelaide* (1999), *Melbourne* (2008) and *Alice Springs (Mparntwe)* declarations (WEF, 2019), and in the relations between these elements and the discourses of the 4IR and *Future of Jobs* (2016; 2018; 2020) produced by the WEF.

Facer (2019, p. 5) suggests that the "colonisation narrative", "positions the future as a desired end state to be achieved by action in the present". Facer cites the work of Annette Gough and claims that there is a tendency in education to focus on young people's development "of values and capabilities necessary to produce a future world that is envisaged *for them* [original emphasis], by educators and adults, many of whom will not be living in that future". Drawing on Facer's critique of the colonisation narrative, I propose that in Australia's neo-liberal education apparatus, futures are most often defined by an exclusive, corporate elite such as those stakeholders who invest in and interact with organisations such as the WEF and the OECD. As I have signalled at various points, young people's voices (which speak to the complexity of their lives, thoughts and feelings about their presents and futures) have been made absent from dominant discourses and global stakeholder networks, even with the emergence of principles such as "stakeholder capitalism" guiding the work of organisations such as the WEF.

Facer's (2019, p. 5) analysis of a "contingency" narrative of the future, provides a focus on "the inadequacy of education alone as a force for human flourishing". Facer's (2019, p. 5)

move here encourages analysis of the "material forces, whether military power, democratic structures, a free and trustworthy media, or available water and fertile land, in creating liveable futures". In this sense, futures abstracted from place, such as the WEF's analysis at the level of the nation state, and comparison across "developing" and "developed" economies, subjugate knowledges of the "material forces" and possibilities for "creating liveable futures" (Facer, 2019, pp. 4–5).

In order to explore alternative discourses to the optimisation, colonisation, and contingency narratives of the future outlined here, Rosi Braidotti's "affirmative politics" introduces a productive approach to knowing and shaping futures. Braidotti (2013, p. 185) argues that the future is "nothing more or less than inter-generational solidarity, responsibility for posterity", and "is also our shared dream". In this sense, a "yearning for sustainable futures can construct a liveable present. This is not a leap of faith, but an active transposition, a transformation at the in-depth level" (Braidotti, 2013, p. 192). Rather than seeking to produce and reproduce universal, technocentric, knowable and uncertain futures, futures might be "rooted in the ordinary micro-practices of everyday life", and be "aimed at the affirmation of hope" and making "sustainable transformations" (Braidotti, 2013, p. 192). In her analysis of the OECD's global competency framework, Robertson (2019, p. 180) also echoes this call for different ways of shaping futures and subjectivities:

> A more radical global perspective and competency would ask about the link between, for example, climate change, capitalism's model of accumulation – of dispossession and extraction, and the dominant perpetrators. Placing cultures and their differences 'over there' as an exotic feature of nationals in another country and not within, reinforces the us-them divide that has been a characteristic of modes of imperialism (Harvey 2003) and contemporary forms of authoritarian populism.

Robertson (2019, p. 180) advises that we need to become "attentive to both accumulation and social cohesion at the same time" and warns about the universal, technocentric futures and

skills which shape social ontologies and become a "common sense way of understanding global affairs and our orientations to the labour market, shape our encounters with others who are different, mediate our communications, and guide our actions".

Drawing on Facer (2019), I suggest that in Australia's neo-liberal education apparatus, the future of work has been made knowable and optimised as a technical problem, colonised by significant others (and silencing young people) and tends to visit responsibility for patterns of discrimination and exclusion on education, schooling, young people and teachers (Braidotti, 2019). This future is, in this context, disassociated not only from bodies, places and experiences, but also from knowledges about the past, the present, the entanglement of pasts, presents and futures, alternative modes of temporal orientation and anticipation, and the entanglement of "climate change, capitalism's model of accumulation – of dispossession and extraction, and the dominant perpetrators" (Robertson, 2021, p. 180). Knowledges of the multiple, complex and culturally situated and embodied experiences of time, and/in relation to space, in different human and non-human socio-ecologies are also subjugated in this apparatus.

Interlude – Michael's Story

Michael's story was also first published in a book chapter titled "'Being young', 'living well', in/beyond the pandemic: Exploring the entanglements between COVID-19, the Anthropocene and young people's wellbeing" for an edited collection titled *Wellbeing: Global Policies and Perspectives* (Kelly, Brown & Goring, 2022b).

As already indicated, our intent in this chapter was to discuss some of the health and wellbeing challenges that many young people have faced during the COVID-19 pandemic. We drew on Samantha Frost's (2016) discussion of "biocultural creatures" to consider the entanglement of young people with diverse others, including human and non-human, material and immaterial, and in "biocultural habitats" (Frost, 2016). In this chapter, young people's stories function as both literal, and allegorical narratives as we drew on these concepts in order to think about ways of moving beyond individualised notions of young people's wellbeing.

In developing that argument, we drew on some of the outcomes of a place-based scenario planning project in Melbourne's (Australia) inner northern suburbs that was undertaken in the last half of 2020. The project, titled "COVID-19 Recovery Scenarios for Young People in Melbourne's Inner North", was a collaboration with the Inner Northern Local Learning Employment Network (INLLEN) and its Inner North Youth Employment Taskforce (INYET). As part of that project, we used a video-capture platform (Video Ask) to conduct video interviews with 53 young people during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections during August–November 2020. The project was shaped by a scenario planning methodology and had a future orientation to the year 2025. In that paper we presented the stories of three young people from the midst of Melbourne's second lockdown. In that context, we suggested that

these stories were meant to be illustrative and inclusive – but not representative – of some of the concerns, anxieties, uncertainties, and hopes that young people in Melbourne's inner north gave voice to when we provided them with an opportunity to reflect on and respond to questions about their presents and futures.

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Michael, was a twenty-three year old Greek-Australian young man who lives in the city of Darebin. Michael told us that he had strong connections to his two brothers and two sisters, one of whom was his twin. He identified strongly with his Greek heritage and community, and Greek Orthodox religion. In the midst of the pandemic and lockdowns Michael had been dealing with disruptions to his employment and study, and disconnections from his disability support workers, family and friends. At the same time he had to deal with a recent diagnosis for a brain tumour which required that he underwent chemotherapy. Our sense was that Michael was a community-minded, compassionate and brave young man. Michael's "story from lockdown" captured his hopes for a sustainable and healthy future: for himself, for others, and for the world around him in the face of severe personal health issues.

Prior to the pandemic, Michael was studying a Diploma in Nursing at a Technical and Further Education (TAFE) college. He had also worked a part-time job at a store which sold office and school supplies:

> I was working at Officeworks part-time for the last six years, but unfortunately that has gone the way of all the other jobs at this time due to COVID-19.

Michael also struggled with online learning during the pandemic, particularly given the limitations placed on the practical components of his nursing course. In telling us about these difficulties Michael held back feelings of frustration and despair about his studies, and tried to remain positive:

> The most difficult thing about studying and this COVID-19 thing has been online study. Not being able to get that proper human interaction has made it really difficult […] I've enjoyed my course regardless. I've learned a lot, I've got a lot out of this course, but trying to cope with online studies is really difficult.

In addition to disruptions to his studies, Michael was also unable to see his partner, who lived in regional Victoria. This isolation from his partner was particularly difficult during the time of his diagnosis with a brain tumour. Michael was "philosophical" about the impact of public health responses to the pandemic while undergoing hospital treatment and care, and the additional challenges this produced for him and his family and partner:

> The thing is, when you're in the hospital, you can't have any visitors due to COVID-19 and that has really impacted my life. I can't lie. I can't see anyone and I'm not able to go out. My family can't bring me food. They can't bring me a change of clothes. I'm not able to do anything by myself. I have to rely on the nurses, but um, I'm getting there.

In the face of these challenges, Michael told us about his nursing studies, his education, as a source of hope and a connection to his aspirations for the future.

> Hopefully soon they'll open up the hospitals, and I'm going to be able to see people and continue with my studies.

Michael had a clear sense of his education and career aspirations, and the pathways available to him. It was these education and career pathways that Michael imagined as foreshadowing other possibilities and milestones for his life.

> To move in with my partner and start a family which would be fun and I think I'll enjoy that.

When asked to imagine the future in 2025, Michael believed that COVID-19 would still be a problem. He hoped, however, that:

> People will be a lot more diligent of their own health and be able to look after people around them by using sanitizers and face masks.

Michael's interview responses often diverted attention from himself, and toward the importance of good health care. Like many young people that we spoke to in this project, Michael invested hope for positive change through the collective possibilities of his community and community organisations. He remained optimistic and resilient in the face of his own health, employment and education concerns.

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Michael and I first connected through a social justice organisation based in the inner north of Melbourne, which provides disability support services to young people. It was clear from the outset that Michael wanted to impart a sense of optimism and hope to other young people in his community, and to draw on the health and personal challenges that he had overcome, and continued to face. As he told us, "proper human interaction" was of critical importance for Michael. A lack of these interactions was compounded during COVID-19 lockdowns, when Michael was unable to see his partner, and have his friends and family visit him in hospital while undergoing treatment. Michael's affective relations to important people in his life, fellow students and his community, coupled with the impact of medical treatment on his own body, are significant elements in shaping his capacities, and sense of the future at different moments. As Coffey (2020, p. 79) has suggested, "the entirety of 'a life' informs a body's capacities", and "all of the various elements of everyday life assemble to produce the conditions of possibility for living".

Michael's story also highlights some of the contradictions and ambivalences that many young people face as they navigate Vocational and Higher Education, imagine and aspire to a "good life", to get a decent job, to gain independence, and to start a family. Michael's dismissal from his part-time job at a prominent national office supplies store chain during the pandemic lockdowns speaks to the insecurities that many young people face as they occupy a

disproportionately high number of casual positions and precarious employment arrangements (see for example, Cook et al., 2021; Coffey et al., 2021). As I discussed in Chapter Five, Cook et al. (2021), and Furlong and Kelly (2005) have highlighted the reproduction of precarious work arrangements and cycles of disadvantage through neo-Liberal economic reform. Michael's story speaks directly to these trajectories and silences, highlighting their consequences in times of crisis, reproduced through discourses such as the 4th Industrial Revolution.

Chapter Six: The Future of the Planet: Educating Young People in/for Sustainable Development

Introduction

In Australia's neo-liberal education apparatus, the UN and UNESCO have become key global stakeholders in shaping discourses of the future of the planet in relation to young people and education. In many of the reports discussed so far, knowledges of the complex entanglements and dependent relations between human life, environments, the biosphere, ecological systems and non-human plant and animal species are either erased, or otherwise made knowable through discourses which position "nature" as a resource. As I discuss in Chapter Two, the changes and challenges of the future became prominent in Australian national education declarations during the last decade of the twentieth century, and have tended to focus on technological development and labour market flexibility, globalisation, the changing nature of work, and the relations between young people, education and the economic prosperity and growth of the nation. In this context, the problem of climate change emerged as a significant challenge for a short period of time and found expression in different ways in Australia's neo-liberal education apparatus in the *Adelaide Declaration* (1999) and the *Melbourne Declaration* (2008), however this "problem" was erased from the *Alice Springs (Mpartnwe) Declaration* published in 2019.

As Chapter Five discusses, during 2016, 2018 and 2020, the WEF produced discourses of the future which subjugated knowledges of renewable energy transitions, alternative economic models and logics, and knowledge of the entanglement of human and non-human life. These environmental dimensions, however, have not been made entirely absent in Australia's neo-liberal education apparatus throughout its emergence over the last five decades. The forms of power/knowledge/subjects which shape the work of the UN and its agencies have changed considerably over the past five decades. The work of the UN and UNESCO, as I describe in

this chapter, provide examples of the ways in which dominant understandings of the future of the planet, mediate and shape the actions of many OECD economies, education policies, systems and structures. These knowledges and the agencies that produce and reproduce them, have become key elements in Australia's education apparatus, and understandings of the future of the planet in that apparatus. As I make clear in this chapter, an assemblage of global knowledge flows, policy discourses, political and social figures and Australian Federal Government departments have enabled these ways of knowing the future of the planet to circulate and gain authority.

This chapter maps and describes these networks, silences and discontinuities, by tracing the emergence of the concept of Sustainable Development. I situate the genealogical work of this chapter within the context of planetary crisis and trace the complex, unstable, and contested histories of discourses of Sustainable Development, from its beginnings in the late 1960s, until its intersection with education policy through notions of Education for Sustainable Development (ESD) and the Sustainable Development Goals (SDGs). A wide range of declarations, policies, and UN General Assembly Meeting minutes are discussed in this chapter, in order to do this genealogical work. These include, *The Brundtland Report* (1987), *The Rio Declaration* (1992) and *Agenda 21* (1992), *The Millennium Development Goals* (2000), *The Decade of Education for Sustainable Development* (2005–2014) and *The Future We Want (2012)*, the *Hangzhou* (2013), *Muscat* (2014), and *Incheon* (2015a) declarations, and *Sustainable Development Goal 4 (SDG4) Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all* (2015). The final subsection of this analysis outlines a *5-Year Progress Review of SDG4 – Education 2030 in Asia-Pacific (2021).*

Drawing on examples from this history, key documents, declarations and events, I develop three key arguments. These arguments speak to the most significant silences and discontinuities identified in the emergence of these discourses, and which are significant to the reproduction of these discourses in Australia's neo-liberal education apparatus. In the first discussion section, I revisit the writing of Jeffrey Sachs (2015), and draw on the work of Spijkers (2018) and Urry (2016) to explore the erasure of an intergenerational ethic from these ways of knowing the future of the planet. In a second discussion section, I return to the work of Braidotti (2013) and Lloro (2015) to argue the limits of anthropocentric frameworks as dominant ways of knowing planetary futures and education. In a final discussion section, I argue that collective youth movements such as the School Strikes for Climate (SS4C) and Fridays for Future (FFF) offer much for unsettling and rethinking dominant, neo-liberal, anthropocentric discourses of the future of the planet. I also engage with the work of Haraway (2016) in order to frame these discussions. I argue that that the UN's discourses of Sustainable Development and approaches to knowing and governing the future of the planet, present timely possibilities for rethinking relations of power/knowledge/subjects which are shaped by post-human ontologies and for the re-emergence of an intergenerational ethic. I revisit these final remarks in the Coda.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) and Education for Sustainable Development (ESD)

According to the United Nations Charter (United Nations, 2020, Chapter 1) the UN is an intergovernmental organisation whose purposes include maintaining "peace and security", to hold nations accountable for upholding the principle of "equal rights and self-determination of peoples", to "achieve international co-operation in solving international problems", and to be the "centre for harmonizing the actions of nations in the attainment of these common ends". As the leading UN agency for Education, UNESCO (2022a, n.p.) brings together

education institutes, centres and networks to “promote learning that brings about personal transformation, resilience, peace and a sustainable planet”. UNESCO’s (2022a, n.p.) mandate “to promote lifelong education for everyone” is claimed to have its beginnings in the “aftermath of World War II and has evolved to meet the global challenges of a digital era and a planet threatened by climate change, conflict and other crises”. UNESCO led the “Global Education 2030 Agenda through Sustainable Development Goal 4 with the Education 2030 Framework for Action as a roadmap” (UNESCO, 2022a, n.p.). UNESCO (2022a, n.p.) has five core functions:

1. Laboratory of ideas: We anticipate and respond to emerging trends and needs in education, generating tailormade ideas and policy based on research

2. Clearinghouse: We develop and strengthen education systems by creating, implementing and sharing successful policies and practices.

3. Standard-setter: We set and develop standards, norms and guidelines in key education areas and monitor how they are implemented

4. Catalyst and motor for international cooperation: We start and promote dialogue, exchange and partnership among education leaders and stakeholders.

5. Capacity-builder: We provide technical advice and support to develop the institutional and human capacity of countries to achieve their education goals.

These functions have seen UNESCO become one of the most influential drivers of change in education systems globally. UNESCO coordinate and develop a global coalition for education, the Sustainable Development Goal 4, a global network of learning cities, and Global Education Monitoring (GEM). UNESCO’s (2022b, n.p.) *Global Education Monitoring (GEM) Report* began in 2002 as the *Education for All Global Monitoring Report* with the aim of holding the global community to account for the commitments they made to education progress. The UN, and UNESCO more specifically, have established strategic partnerships with global organisations such as the WEF and OECD. In the case of the UN

and the WEF, a strategic partnership was signed and announced in 2019, with UN Secretary-General António Guterres making the following statement at that time:

> The new Strategic Partnership Framework between the United Nations and the World Economic Forum has great potential to advance our efforts on key global challenges and opportunities, from climate change, health and education to gender equality, digital cooperation and financing for sustainable development. Rooted in UN norms and values, the Framework underscores the invaluable role of the private sector in this work – and points the way toward action to generate shared prosperity on a healthy planet while leaving no one behind (WEF, 2019, June 13, n.p.).

Both organisations have become significant elements in framing discourses of young people, education and uncertain futures in Australia's neo-liberal education apparatus. While their mandates and focuses differ, they reference, circulate and reproduce particular discourses of the future of the planet, education, training and work, what young people need to be and become in/for these futures, and set the standards, goals, targets, policies, programs and interventions which flow from this global governance level. UNESCO (2022a, n.p.) aims to address significant challenges condensed in discourses of Sustainable Development, in relation to education:

> Worldwide around 258 million children and youth are deprived of education because of social, economic and cultural factors. And an estimated 617 million children and adolescents cannot read a simple sentence or undertake a straightforward maths calculation. Three-quarters of children of primary school age who will never set foot in school are girls. Boys are more frequently disengaging from education and are at greater risk of falling behind in school. Women still account for almost two-thirds of all adults unable to read – 515 million of them lack basic reading skills. Only 2% of the poorest rural females in low-income countries complete upper secondary school. The COVID-19 pandemic that led to near universal school closures and reliance on distance learning solutions, has exacerbated educational inequalities and threatens progress across the development agenda.

In order to address these challenges UNESCO (2022a, n.p.) aims to "rethink and reimagine education for a sustainable future while providing concrete guidance on how to strengthen and improve education systems worldwide" by "supporting countries", "empowering learners" and "leading and coordinating". While UNESCO's aims are worthy, and the

recognition of these problems is critically important, Facer's (2019, p. 5) work serves as a reminder of "the inadequacy of education alone as a force for human flourishing". As indicated in the previous chapter, Facer (2019, pp. 4–5) calls for greater analysis of the "material forces, whether military power, democratic structures, a free and trustworthy media, or available water and fertile land, in creating liveable futures".

The story of Sustainable Development that I develop below begins in the late 1980s and traces, among other things the emergence, and then the discontinuity of an intergenerational ethic in discourses of Sustainable Development. The story also focuses on anthropocentric approaches to education in the face of planetary crisis. This genealogical work can make a space for thinking differently about the theories and frameworks informing Sustainable Development, ESD and the ways in which the future of the planet is understood in relation to the trajectories of neo-liberal global capitalism.

The Brundtland Report (1987), The Rio Declaration (1992) and Agenda 21 (1992)

In order to consider the relationship between the terms *Sustainable Development* and *education* I trace its early usage, which was fundamentally about responding to growing scientific evidence that humans were causing irreversible damage to earth systems in the 1960s and 70s. One key document in producing these ways of knowing the present and future is the 1987, *Report of the World Commission on Environment and Development: Our Common Future* (WCED, 1987). The report has come to be known as *The Brundtland Report* after the Chairman of the report, Gro Harlem Brundtland, the then Prime Minister of Norway. At that time there was a shared understanding across UN member states that there was a need for long-term environmental strategies for achieving Sustainable Development by the year 2000. Brundtland signed the Foreword to the report, (WCED, 1987, Chairman's Foreword) and described the challenges associated with finding Sustainable Development paths, the

need for multilateral solutions, and the need to restructure international economic systems of cooperation that "cut across the divides of national sovereignty, of limited strategies for economic gain, and of separated disciplines of science". *The Brundtland Report* (WCED, 1987, Chairman's Foreword) identified a problem with the dominant logics of "development" in capitalist economies during that time, and imagined what past generations might think of the state of the planet:

> Scientists bring to our attention urgent but complex problems bearing on our very survival: a warming globe, threats to the Earth's ozone layer, deserts consuming agricultural land. We respond by demanding more details, and by assigning the problems to institutions ill-equipped to cope with them. Environmental degradation, first seen as mainly a problem of the rich nations and a side effect of industrial wealth, has become a survival issue for developing nations. It is part of the downward spiral of linked ecological and economic decline in which many of the poorest nations are trapped. Despite official hope expressed on all sides, no trends identifiable today, no programmes or policies, offer any real hope of narrowing the growing gap between rich and poor nations. And as part of our 'development', we have amassed weapons arsenals capable of diverting the paths that evolution has followed for millions of years and of creating a planet our ancestors would not recognize.

The Brundtland Report (WCED, 1987, Chairman's Foreword) also included the urgent call for cooperation among all countries "at different stages of economic and social development" and the "international community" more broadly, to produce a "long-term agenda for action" and "shared perception" of "common and mutually supportive objectives that take account of the interrelationships between people, resources, environment, and development". These goals were accompanied by what had become a commonly cited definition of Sustainable Development as a form of development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, Chairman's Foreword). Brundtland (WCED, 1987, Chairman's Foreword) states:

> But the 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable. Further, development issues must be seen as crucial by the political leaders who feel that their countries have reached a plateau towards which other nations must strive. Many of

> the development paths of the industrialised nations are clearly unsustainable. And the development decisions of these countries, because of their great economic and political power, will have a profound effect upon the ability of all peoples to sustain human progress for generations to come.

This concern for an intergenerational approach to Sustainable Development, and the entanglement of economic, social and environmental challenges would shift significantly in the decades that followed.

Five years after *The Brundtland Report* (WCED, 1987), in 1992, the UN Conference on Environment & Development (UNCED) was held in Rio de Janeiro, Brazil. *The Rio Declaration on Environment and Development* (United Nations, 1992a) was subsequently produced, seeking to reaffirm and build upon the *Declaration of the United Nations Conference on the Human Environment* (1972), adopted in Stockholm in 1972 as the first declaration on global environment. This declaration aimed to establish "a new and equitable global partnership through the creation of new levels of co-operation among States and key sectors of societies and people". *The Rio Declaration* (United Nations, 1992a, pp. 1–5) sets out 27 key principles, including a number which problematise young people, education and futures:

> Principle 1: Human beings are at the centre of concerns for sustainable development. They are titled to a healthy and productive life in harmony with nature.
>
> Principle 3: The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.
>
> Principle 21: The creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

These three principles highlight a human-centred and an intergenerational approach to Sustainable Development, and the emerging relations between the behaviours and dispositions of young people and futures. *The Rio Declaration* (United Nations, 1992a) was a critical moment in producing and reproducing discourses of Sustainable Development, and

the emergence of governance structures that would later bring these ideas into global policies aimed at young people and education systems. This declaration was influential in the mobilisation of documents, conferences and curriculum resources concerned with the transformation of education systems, structures and students so that they could navigate environmental crisis and economic development.[44]

In order to create a more robust link between Sustainable Development and education, In April 1992, *Agenda 21* (United Nations, 1992b) was published. This document brought together the aims of the conference outcomes and policy documents that preceded it, with a vision specific to Sustainable Development in relation to education. The purpose of *Agenda 21* was to build on the premises of General Assembly resolution 44/228 made on 22 December 1989, and to set out an agenda emerging from the UN Conference on Environment and Development. *Agenda 21* aimed to reflect "a global consensus and political commitment at the highest level on development and environment cooperation" (United Nations, 1992b, Para 1.3) by setting out a number of specific programs to enable new global partnerships, and to meet the principles of Sustainable Development stated in the *Rio Declaration* (1992a). Chapter 25 of *Agenda 21*, "Children and Youth in Sustainable Development", specifically defines the roles and responsibilities, actions and programs concerning young people and education systems in relation to Sustainable Development and environmental change. It also seeks to mobilise interventions which would support "advancing the role of youth and

[44] Annette Gough (2016; 2017; 2018) has made significant contributions to scholarship on the emergence of Sustainable Development and education, and has taken up a critical engagement with some of the policy documents and declarations discussed here, and discourses of Education for Sustainable Development (ESD). In an analysis of the Sustainable Development Goals, for example, Gough (2018, p. xxv) argues that "increasing global inequalities require governments to take a stronger role in promoting education for sustainable development and global citizenship" because these elements "struggle to find a place in curriculum" and there is "a lack of lack of international consensus and commitment" on economic, social and environmental issues. Gough (2016, p. 109) has also explored the "almost universal lack of success in introducing coherent or consistent programmes of EE/ESD into teacher education courses", despite them being regarded as "essential for achieving sustainable development".

actively involving them in the protection of the environment and the promotion of economic and social development" (1992b, Chapter 25). *Agenda 21* (1992b, Para 1.1) also takes wider aim at the "integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future".

In Chapter 36 of *Agenda 21*, education, public awareness and training is framed as critical to achieving progress towards sustainability and for building the capability of young people to address development and environment issues. Children, young people and their education was becoming an important node for realising the aims of Sustainable Development in the 1990s, through a concept which was contested, and attempting to deal with the tensions and challenges of economic and social development as well as environmental protection. The production of global goals in the years that followed, were important events in the reproduction and transformation of these discourses.

The Millennium Development Goals (2000), the Decade of Education for Sustainable Development (2005–2014) and The Future We Want (2012)

Almost eight years after the *Rio Declaration* and *Agenda 21*, the Millennium Summit was held in September 2000 at UN Headquarters in New York. The Summit concluded with the production of the *Millennium Declaration* (2000) which set out eight Millennium Development Goals (MDGs). The eight MDGs aimed to commit "world leaders to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women", and targets were set to monitor progress to 2015, from 1990 levels (WHO, 2022, n.p.). UN (WHO, 2022, n.p.) member states and organisations committed to the following eight goals:

1. To eradicate extreme poverty and hunger

2. To achieve universal primary education
3. To promote gender equality and empower women
4. To reduce child mortality
5. To improve maternal health
6. To combat HIV/AIDS, malaria, and other diseases
7. To ensure environmental sustainability
8. To develop a global partnership for development.

The MDGs were measured by 21 targets. By 2005, in an effort to integrate the principles, values and practices of Sustainable Development and the MDGs into education and learning, the UN established the "Decade of Education for Sustainable Development" (DESD) from 2005–2014. UNESCO was the lead agency for the DESD. Following the development of the DESD, UNESCO's *Education for Sustainable Development Toolkit* (UNESCO, 2006) was produced. The Foreword of the toolkit states that communities and education systems need to "dovetail their sustainability efforts […] as communities develop sustainability goals, local educational systems and programs can modify existing curricula or create new programs to reinforce those goals" (UNESCO, 2006, Foreword). Programs and reports such as the ESD Toolkit (2006) frame education as an essential mechanism for achieving Sustainable Development. The ESD Toolkit (2006, p. 9) describes a tension surrounding the role of educators in shaping ESD concepts, tools and pedagogies:

> In many countries, ESD is still being shaped by those outside the education community. The concepts and content of ESD in these cases are developed by ministries, such as those of environment and health, and then given to educators to deliver. Conceptual development independent of educator input is a problem recognized by international bodies as well as educators.

In this sense, ESD can be understood as an early effort of the UN and affiliated stakeholders, to bring particular, and contested ideas of Sustainable Development into schools and classrooms, and to consider how these challenges relate to the responsibilities of education and school communities, teachers and students.[45] A series of declarations and agreements produced between 2012 and 2015, were significant in building on this work, beginning with *The Future We Want* (UNESCO, 2012) which established the conditions for the production of theories, concepts and targets which would give shape to the "Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".[46] By 2012 Sustainable Development was being defined by the UN General Assembly (UNGA), in *The Future We Want* (UNESCO, 2012, Annex 5. p. 2) as:

> promoting sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting the integrated and sustainable management of natural resources and ecosystems that supports, inter alia, economic, social and human development while facilitating ecosystem conservation, regeneration and restoration and resilience in the face of new and emerging challenges.

The ways in which the future of the planet was being named and known in *The Future We Want* in 2012, differs from *The Brundtland Report* (WCED, 1987, Chairman's Foreword) which framed the beginnings of Sustainable Development as a means to address "urgent but complex problems bearing on our very survival" including "a warming globe, threats to the Earth's ozone layer, deserts consuming agricultural land", "Environmental degradation" as "a

[45] Along with Annette Gough's work (2016, 2017, 2018) outlined earlier, there has been a wider, emergent scholarship on Education for Sustainable Development. Some of this work includes analysis of the pedagogies, perceptions and practices of ESD during the pandemic in Australia (Beasy & Gonzalez, 2021). There is an academic journal dedicated to the subject titled the *Journal of Education for Sustainable Development.* A special issue of the journal *Sustainability* (2019) also includes seven papers which problematise the relationship between the sociology of education and sustainability.

[46] This report is not to be confused with the OECD's *The Future We Want,* produced in 2018.

survival issue for developing nations", and a "downward spiral of linked ecological and economic decline in which many of the poorest nations are trapped".

Jeffrey Sachs (2015) is a Nobel Prize winning economist, and one of the chief architects of the United Nations Sustainable Development agenda (which has resulted in the framing of 17 Sustainable Development Goals). In an Introduction to the historical development of the concept of Sustainable Development, and drawing on evidence from the UN General Assembly (2012), Sachs (2015, p. 6) highlights how the aims and needs of the SDG's, originally framed in *The Future We Want* were designed to be "action-oriented, concise and easy to communicate, limited in number, aspirational, global in nature and universally applicable to all countries while taking into account different national realities, capacities and levels of development and respecting national policies and priorities". Importantly, this revised definition of Sustainable Development meant that "Governments should drive implementation [of the SDGs] with the active involvement of all relevant stakeholders, as appropriate". The focus on the three abstract, universally applicable dimensions of economic development, social development and environmental protection in *The Future We Want*, as I will demonstrate, emphasises the aims and needs of present generations and their trajectories in "present futures", dilutes a sense of urgency in relation to environmental crisis, and increases a sense of acceleration in relation to economic development.

Hangzhou (2013), Muscat (2014), SDG4 (2015) and Incheon (2015)

In May 2013 the *Hangzhou Declaration: Placing Culture at the Heart of Sustainable Development Policies* was produced. The *Hangzhou Declaration* (UNESCO, 2013) amplified particular ways of knowing "culture" as central to economic (and environmental) development, and would inform debates and resolutions made in *The Resolutions of the 37th session of UNESCO's General Conference on Education Beyond 2015* (UN, 2013), later that

year. The *Hangzhou Declaration* (UNESCO, 2013, p. 5) calls for "the full integration of culture in the Post-2015 development agenda through clear goals, targets, and indicators". The *Hangzhou Declaration* marked changes to the concepts that would underpin the post-2015 Sustainable Development agenda, and what would eventually become the SDGs. Those changes included, notably, that UNESCO (2013, p. 2) would:

> fully acknowledge the role of culture as a system of values and a resource and framework to build truly sustainable development, the need to draw from the experiences of past generations, and the recognition of culture as part of the global and local commons as well as a wellspring for creativity and renewal.

These concepts inform the terms in which the SDGs were framed leading up to 2015. While future, unborn generations are not considered a focus in accounts of Sustainable Development, global and national reviews of targets and benchmarks, and the expansion of measurement tools and education programs were emerging at this time. In the *Hangzhou Declaration* (2013), human cultures are understood as drivers and enablers of different forms of capital and development. There were tensions around these approaches during this time, as highlighted in *The Resolutions of the 37th session of UNESCO's General Conference on Education Beyond 2015* (UNESCO, 2013). This conference is recognised as important in shaping the discussions and debates informing the *Muscat Agreement* (2014), and the events related to it, discussed later in this section. The UNESCO conference resolutions document includes a summary (in Annex 1) of the Leaders' Forum held during the general policy debate at the 37th session on 6 November 2013. The conference discussion notes competing visions of the future, as expressed by global education ministers and delegates, in relation to different understandings of Sustainable Development, the SDGs and their general aims. This discussion was a significant moment in reflecting upon the successes and failures of the Millennium development goals and about the character of Sustainable Development. The "President of the General Conference" was Mr Hao Ping (People's Republic of China), with

vice-presidents of the conference listed as the heads of delegates of a number of member states including Australia. The report includes notes on discussions about the successes (and limitations) of the goals over the preceding 13 years, and how the new goals would be likely to reshape the next decade and a half until 2030. In the *Resolutions of the 37th session of UNESCO's General Conference*, the Millennium Development Goals are described as "unfinished business" and that "while vast progress has been achieved – especially regarding poverty reduction – it has been both insufficient and uneven" (UNESCO, 2013, p. Annex 1).

Discussion among national delegates at this conference included the relations between the roles and responsibilities of humans, nature, and culture to global and national priorities. The summary of *The Resolutions of the 37th session of UNESCO's General Conference on Education Beyond 2015* stated (UNESCO, 2013, p. 137) that "the path to the future had to espouse the trail set by the MDGs and the UNESCO-led Education for All (EFA) goals" and "these international agendas have succeeded in creating an unprecedentedly broad awareness", but "the lives of millions and millions of women and men, girls and boys, are still trapped in inhuman conditions". In the report, the Director-General of UNESCO (2009–2017), Irina Bokova (UNESCO, 2013, p. 137) of Bulgaria, is cited as stating that "culture is the foundation of the future" and the need for recognition of culture as a "lever in development". These ideas, which echo the limits of present futures disassociated from place and culture, are reflected in the discussion notes from the conference, for example:

> Sustainable development can happen only if it is embedded in the cultural experience of people. This very experience is a source of identity, prosperity and social harmony. UNESCO will have to promote the positive forces of culture. But, as stressed by Mr Sheikh Nahayan Mabarak Al-Nahayan, Minister of Culture, Youth and Community Development of the United Arab Emirates (UAE), speaking for the President of UAE, its role will also be to prevent the politicization of culture as a means to oppose nations and to spread conflict and terror. In turn, Mr Mohammad Javad Zarif, Minister of Foreign Affairs of the Islamic Republic of Iran noted that, in an age of unprecedented interdependence, it is only through mutual understanding that problems could be solved, which required governments and civil society to commit to

> an intensification of intercultural dialogue leading to a rapprochement, and eventually to a synergy, of cultures. (UN, 2013, p. 137)

These notes from the UNESCO general conference on education reflected the debates among UN delegates in relation to competing priorities and approaches, concepts and concerns which gave shape to the SDGs and its programs. Ms Laura Chinchilla, President of the Republic of Costa Rica's contribution is cited in the discussion notes stating, for example, that "it was more than urgent to achieve harmony among people and with nature. This is the essence of sustainable development, which must involve renewed action with respect to climate change, biodiversity losses or oceanic degradations" (UNESCO, 2013, n.p.). *The Resolutions of the 37th session of UNESCO's General Conference on Education Beyond 2015* (UNESCO, 2013, p. 138) signalled a "tipping point":

> The international community is faced with a growingly complex set of challenges. For example, the legitimate quest for prosperity of developing and emerging countries puts to test the capacity of our planet to absorb the environmental impact of unfettered growth and unsustainable consumption patterns, which are a threat to our common future. Climate change is accelerating, with carbon emissions estimated to reach a high of forty thousand million tons by 2020. Biodiversity losses, water shortages, desertification and ocean degradation are increasing. The population dynamics place further strain on the environment – an environment that we are responsible for, not the reverse. Humanity stands at a tipping point in its history.

Discussion about the roles and responsibilities of young people, and future generations in the Sustainable Development program, are captured in the section "the collective responsibility to meet the aspirations of youth" (UNESCO, 2013, p. 139). This section states that young people's "aspirations are stifled by unemployment, lack of opportunity, and exclusion from decisions that impact their lives". It further claims that what is needed are "dedicated interventions in the areas of skills development and technical vocational education and training, as well as science, technology and innovation", and "to take into account the voices and priorities of youth through more participatory forms of consultation and governance" (UNESCO, 2013, p. 139). In response to the discussions informing the review, the resolution

document (UNESCO, 2013, p. 140) describes how the MDGs had a renewed emphasis on culture, arguing that this emphasis should be continued, where "Culture is a driver and an enabler for sustainable development and as such should be a pillar of the post-2015 development agenda".

Culture takes on a particular meaning in this context. The UNESCO resolution (2013, p. 140) document states that there is a need to expand "the creative economy" in the development of countries because "culture-led development ensures greater social inclusiveness, innovation, creativity, and entrepreneurship". The report (UNESCO, 2013, p. 140) suggests that, that prior to the MDG's, "the tendency to frame development solely in economic terms, and not as a combination of economic, environmental and social factors was as a limiting factor of the traditional development models, which often ignored culture in the name of a so-called modernity".

The *Muscat Agreement* (UNESCO, 2014) reviewed the successes and failures of the Education For All (EFA) initiatives from 1990 (and reaffirmed in Dakar in 2000). "Ministers, heads of delegations, leading officials of multilateral and bilateral organizations, and senior representatives of civil society and private sector organizations" gathered in Muscat, Oman, during May 2014, for the Global Education for All (EFA) Meeting, at the invitation of the Director-General of UNESCO Irina Bokova (UNESCO, 2014, p. 1). Education For All (EFA) was an international initiative launched at the World Conference on Education for All in Jomtien, Thailand in 1990 by UNESCO, the United Nations Development Programme (UNDP), the United Nations Population Fund Activities (UNFPA), the United Nations International Children's Emergency Fund (UNICEF) and the World Bank. The aim of EFA was to "universalize primary education and massively reduce illiteracy by the end of the decade" (IBE, 2022, n.p.). The purpose of the *Muscat Agreement* (UNESCO, 2014, p. 1) was

to review and report on the status of the EFA initiatives. The agreement stated that that both EFA and the "education-related Millennium Development Goals (MDGs) are unlikely to be achieved by 2015" (UNESCO, 2014, p. 1). UNESCO (UNESCO, 2014, p. 1) also describes the global progress and achievement in relation to the MDG global targets in the *Muscat Agreement*:

> More than 57 million children and 69 million adolescents still do not have access to effective basic education. In 2011, an estimated 774 million adults, of whom almost two-thirds were women, were illiterate. Non-completion of formal schooling, insufficient levels of basic skills acquisition, and the quality and relevance of education are of key concern. At least 250 million children are not able to read, write or count well even after having spent at least four years in school.

In light of these statistics, the *Muscat Agreement* sought to frame a new set of global goals and to quantify, in percentage values, and in relation to targets, the work that needed to be done in the coming decade in order to make progress on Sustainable Development and Education for All. The *Muscat Agreement* states that "By 2030, at least x% of youth and y% of adults have the knowledge and skills for decent work and life through technical and vocational, upper secondary and tertiary education and training" (UNESCO, 2014, p. 3). One of these targets is erased by the time the Sustainable Development agenda and *The Incheon Declaration* targets were produced for SDG4. The target, which speaks to concerns for wealth distribution at the national level and funding to public education, was represented in The *Muscat Agreement* discussion and draft, and then later removed. That target reads (UNESCO, 2014, p. 3):

> Target 7: By 2030, all countries allocate at least 4–6% of their Gross Domestic Product (GDP) or at least 15–20% of their public expenditure to education, prioritizing groups most in need; and strengthen financial cooperation for education, prioritizing countries most in need.

The *Muscat Agreement* highlights the negotiations that were taking place during the early 2000s and 2010s, around the meaning of Sustainable Development and in relation to

education, young people, culture and the creative economy. These negotiations are important because they highlight the unstable and changing nature of these discourses, during the lead up to the significant event of the production of the SDGs in 2015.

Building on the work of the MDGs, the *Muscat Agreement* review of these goals and initiatives, a total of 17 Sustainable Development Goals (SDGs) were adopted by all UN Member States in 2015, as a "global partnership" between "developed and developing countries" which aimed to "improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests" (UN, 2022, n.p.). In 2015, a significant declaration was produced by the UN, titled *Transforming our world: the 2030 Agenda for Sustainable Development. Transforming our world* (UN, 2015, pp. 14–28) outlines "a plan of action for people, planet and prosperity" and at its heart were "17 Sustainable Development Goals and 169 targets". The ambitious global goals included:

> Goal 1. End poverty in all its forms everywhere
>
> Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
>
> Goal 3. Ensure healthy lives and promote wellbeing for all at all ages
>
> Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
>
> Goal 5. Achieve gender equality and empower all women and girls
>
> Goal 6. Ensure availability and sustainable management of water and sanitation for all
>
> Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
>
> Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
>
> Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
>
> Goal 10. Reduce inequality within and among countries
>
> Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
>
> Goal 12. Ensure sustainable consumption and production patterns

> Goal 13. Take urgent action to combat climate change and its impacts*
>
> Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
>
> Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
>
> Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
>
> Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

Of the 17 Sustainable Development Goals, SDG4 is focussed primarily on education. SDG4 (UN, 2015, pp. 19–20) aims to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". The UN (2015, pp. 19–20) also produced seven core targets (with a total of ten targets including sub-targets) in relation to SDG4:

> 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.
>
> 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.
>
> 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
>
> 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
>
> 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.
>
> 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.
>
> 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.
>
> 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

> 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.
>
> 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

Through SDG4 and its targets, the United Nations aim that education systems can play a key role in addressing gender parity, and producing more inclusive and equitable systems to support First Nations young people, vulnerable young people, young people with disabilities, culturally and linguistically diverse, and gender diverse young people. The role that education is imagined as needing to play in reducing poverty, manage climate change, and responding to gender inequality, are visible in the clear reference to education in the targets of other Sustainable Development Goals. A summary of these links was produced by the Global Education Cooperation Mechanism (GCM, 2022, n.p.) who describe themselves as "the ecosystem consisting of all global education actors that participate in the Global Education Meeting and have agreed to work cooperatively in support of SDG 4" and to build on the work of the *Incheon Declaration* (UNESCO, 2015a). The defined links between education and other SDGs include:

> Health and wellbeing (SDG3 target 3.7):
>
> By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
>
> Gender equality (SDG5 target 5.6):
>
> Number of countries with laws and regulations that guarantee women aged 15–49 years access to sexual and reproductive health care, information and education
>
> Decent work and sustainable growth (SDG8 target 8.6):
>
> By 2020 substantially reduce the proportion of youth not in employment, education or training
>
> Responsible consumption & production (SDG12 target 12.8):

> By 2030 ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
>
> Climate change mitigation (SDG13 target 13.3):
>
> Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.

Building on these goals, targets and links across the SDGs, UNESCO's (UNESCO, 2015a, p. 1) *Education 2030: Incheon Declaration and Framework for Action Towards inclusive and equitable quality education and lifelong learning for all* was produced, and defined a more granular series of elements and aims, targets, programs and indicators related to the implementation of Sustainable Development Goal 4. The *Incheon Declaration* was approved on 15th May 2015 in the city of Incheon, in north-western South Korea. The *Incheon Declaration* (UNESCO, 2015a, p. 4) states that "Over 1,600 participants from 160 countries, including over 120 Ministers, heads and members of delegations, heads of agencies and officials of multilateral and bilateral organizations, and representatives of civil society, the teaching profession, youth and the private sector" were present in Incheon for the World Education Forum. Alongside UNESCO, "UNICEF, the World Bank, UNFPA, UNDP, UN Women and UNHCR" are mentioned as key stakeholders and organisers of the Forum (UNESCO, 2015b, p. 4) and many of these agencies and organisations were represented during the opening ceremony, including the following speakers:

> Ms Irina Bokova, Director-General, UNESCO
>
> High-level representative, Government of the Republic of Korea
>
> Mr Ban Ki-moon, Secretary-General, United Nations
>
> Mr Jim Yong Kim, President, World Bank Group
>
> Mr Anthony Lake, Executive Director, UNICEF
>
> Ms Phumzile Mlambo-Ngcuka, Executive Director, UN Women

> H.H. Sheikha Moza Bint Nasser, UNESCO Special Envoy for Basic and Higher Education
>
> Mr Kailash Satyarthi, Laureate of the 2014 Nobel Peace Prize.

Irina Bokova was Director-General of UNESCO at that time and would remain in that role until 2017 when French civil servant and politician Audrey Azoulay took the position. Across a four-day program that consisted of two days of plenary group sessions and thematic debates, the program includes one delegate from Australia. In a session titled "Educating and learning for peaceful and sustainable societies" chaired by Ms Soo-Hyang Choi, Director of UNESCO, the UN Youth Ambassador to Australia for 2014, Ms Laura John was among six other panellists. This session sought to engage "discussion on how global citizenship education and education for sustainable development can be effectively integrated in education systems in order to help improve the relevance of education in our contemporary world and its capacity to contribute to achieving sustainable development" (UNESCO, 2015b, p. 8).

Drawing on the discussions and debates held at the World Education Forum in 2015, the *Incheon Declaration* was adopted, and includes recommendations on how to implement SDG4 at a national, regional as well as global level. The *Incheon Declaration* also draws on the outcomes of a number of regional ministerial conferences held in 2014 and 2015 and the *Muscat Agreement* (UNESCO, 2014). The Executive summary of the *Incheon Declaration*, "Rethinking Education" (UNESCO, 2015a, p. 10) describes the importance of "Reaffirming a humanistic approach to education". This declaration suggests that "a humanistic and holistic approach to education can and should contribute to achieving a new development model" in which "economic growth must be guided by environmental stewardship and by concern for peace, inclusion and social justice" (UNESCO, 2015, p. 10). *The Incheon Declaration* claims that it is (UNESCO, 2015, p. 7) "inspired by a humanistic vision of education and

development based on human rights and dignity; social justice; inclusion; protection; cultural, linguistic and ethnic diversity; and shared responsibility and accountability".

The Incheon Declaration (UNESCO, 2015, p. 10) states that humanistic approaches to education and learning involve "going beyond narrow utilitarianism and economism" in order "to integrate the multiple dimensions of human existence". Such an approach is designed to emphasise "the inclusion of people who are often subject to discrimination – women and girls, indigenous people, persons with disabilities, migrants, the elderly and people living in countries affected by conflict" (UNESCO, 2015, p. 21).

The Incheon Declaration (UNESCO, 2015, p. 10) argues for the transformation of education in this humanist, or anthropocentric ethic, including "the definition of learning content and pedagogies, as well as for the role of teachers and other educators". That education systems should focus on "humanistic pedagogies" in the context of global ecological crisis, the crisis of capitalism, and biodiversity loss is important in this genealogical inquiry in order to examine the limits and possibilities to these approaches as they function in dominant discourses. *The Incheon Declaration* (2015, p. 7), in building on the work of the Millennium Development Goals and UNESCO's Education for All program, outlined a "new vision" to "transform lives through education, recognizing the important role of education as a main driver of development and in achieving the other proposed SDGs". It did so "with a sense of urgency to a single, renewed education agenda that is holistic, ambitious and aspirational, leaving no one behind". These discourses, as I revisit in the discussion sections, have been understood, in different spaces and in different ways, as implicated in a global regime of neo-liberal educational governance (Tikly, 2016) in which Sustainable Development in/for Education, disadvantage and inequality are constructed in ways contingent upon particular

anthropocentric values, representations and technocentric problem-solution frames (Carant, 2016).

Five-Year Progress Review of SDG4 – Education 2030 in Asia Pacific (2021)

In 2021 UNESCO (UNESCO, 2021) published the report *5-year progress review of SDG 4 – Education 2030 in Asia-Pacific*. The review (UNESCO 2021, p. 8) addresses the following questions:

> How far have countries progressed in the first five years of SDG 4 and what have they achieved? What are the lessons learnt? What opportunities has the COVID-19 pandemic disrupted, and which new opportunities have emerged? Are education systems more equitable and inclusive? Are our children, boys and girls, learning more? Are schools working better than before? And regardless of these changes, are countries prepared to protect their education systems?

This *5-year progress review of SDG 4* (UNESCO, 2021, p. 16) was situated in the context of an Asia Pacific region characterised as "the most disaster-prone area in the world", and by large numbers of displaced persons and refugees, that was being shaped by the "twin shocks of a health emergency and an economic recession". The report states that the climate in this region is becoming "harsher, hotter, and more unpredictable", and there are significant "disparities in living conditions and varying degrees of access to, and quality of, essential services such as health and education" (UNESCO, 2021, p. 16). The Executive Summary of the report includes a series of "calls to action" that include renewed emphasis on the important role that partners outside of traditional education systems, such as the International Telecommunication Union (ITU) and Microsoft, should play in "working to narrow the digital divide" (2021, p. 6). The review also recommends that two priority subgroups should be established to address key concerns in the region including "Digital Transformation in Education, co-led by UNICEF and ITU, and School Health and Nutrition, co-led by UNICEF and UNESCO" (2021, p. 26). UNESCO and UNICEF frame initiatives and recommendations

which seek to increase access to digital infrastructures, as well as to redress gender inequalities and remove structural barriers, while situating these changes in a context of health, COVID-19, environmental and learning crisis.

On the subject of national and global review of achievement in relation to SDG4, in 2018 a "voluntary review" of SGD progress, titled *Report on the Implementation of the Sustainable Development Goals* (AG, 2018b) was completed by the Australian Government (AG), which at the time was a conservative government led by then Prime Minister Malcom Turnbull. The report aimed to measure national progress in relation to targets for each SDG, and the section related to SDG4 begins with the following quote (AG, 2018b, p. 38):

> There are fundamental, structural changes underway in the shape of the economy and the organisation of society. Children starting preschool in 2017 may go on to be employed in jobs we haven't yet imagined. Our education systems are not yet adequately preparing young people for the future.

This particular statement is a quotation from the Mitchell Institute, a key organisation in Australia's education apparatus. The original source is the Mitchell Institute paper titled *Mitchell Institute Policy Paper No. 01/2017* titled *Quality is key in Early Childhood Education in Australia* and written by Kate Torii, Stacey Fox and Dan Cloney (Torii et al., 2017). This institute, and the knowledge that they produce about young people's capabilities, skills and dispositions, function within a complex assemblage of agencies including the OECD'S Programme for International Student Assessment and also Bill Lucas' work in the Centre for Centre for Real-World Learning at the University of Winchester (and at the Mitchell Institute and VCAA). This "voluntary review" of the SDG's at the Australian Federal Government level, signals the influence that these agencies and their networks have in shaping discourses of education in relation to Sustainable Development.

The SDG4 section of this voluntary review focuses mostly on mobilising the kind of "present futures" which flow through key elements in this education apparatus such as the WEF's *The Future of Jobs Report* series. The Australian Government's review (2018b) includes a significant focus on the role of STEM education, global knowledge exchange and partnerships, and resource management and resource sustainability in schools. The voluntary review mostly functions as a report on the programs, inventions and partnerships that the Australian Federal Government were implementing at that time. There are discussions of some of the challenges in relation to education at that time, but no measurement of achievement in relation to targets. In this review, there are a number of significant discontinuities and silences in the ways in which the intent of SDG4 is reproduced and reviewed. Discourses that focus on how young people's aspirations are "stifled by unemployment, lack of opportunity, and exclusion from decisions that impact their lives", which emerged in the *Resolutions of the 37th session of UNESCO's General Conference on Education Beyond 2015* (UN, 2013), and informed the production of SDG4, are not a concern in this Australian Government's voluntary review. The Australian review of progress in relation to the SDGs at the federal level, was concerned with the ways in which Australian education systems have responded to futures of work, to the uncertainty and precarity caused by flexible global labour markets, and the responsibilities, policies and programs that were being developed in school systems, and in relation to other nations in the Asia Pacific region during that time. This includes statements about The *New Colombo Plan*, the Australia Awards and the Endeavour Awards, which fund scholarships and exchanges across Australian and overseas education institutions. The Australian Government states that (AG, 2018b, p. 41) these are "significant investments in a global knowledge exchange that advances SDG4 and other SDGs in Australia". Under "inclusive and quality learning in Australia" the report includes the following statements, which highlight how private

partnerships and technology are imagined as solutions to problems of education inequality and disadvantage in Australia (AG, 2018b, p. 38):

> Government funding for schools includes loadings to target student and school disadvantage, including students with disabilities. Governments work with civil society organisations to provide additional support where needed. For example, the Smith Family's Learning for Life program, funded by the Australian Government, will support approximately 56,200 disadvantaged students by 2020 to achieve improved educational and post-school outcomes. All schools in Australia have access to computers and internet and are adapted for students with disabilities.

This focus on partnerships had also become an influential discourse during the end of the first decade of the twenty-first century, as illustrated in the *Alice Springs (Mpartnwe) Declaration* (2019). In the section, "Leaving no one behind" (AG, 2018b, p. 39), the review expands on the role of technology in dealing with disadvantage, stating that "outcomes for Aboriginal and Torres Strait Islander peoples vary substantially by remoteness area". The review claims that "provision of essential infrastructure such as computers, printers and internet access points to improve internet literacy" will improve education outcomes for Aboriginal and Torres Strait Islander students and adults in remote areas. A similar approach is taken in relation to gaps in women's participation in education, where "the Government is funding a range of organisations to increase awareness and girls' participation in STEM and entrepreneurship education and careers" (AG, 2018b, p. 40). Digital infrastructure and increasing gender parity in relation to participation in sectors of the labour market are critically important. However, when the future is made knowable in terms of technological change to jobs and work, in the Australian context, these interventions are amplified as the best possible solutions to these problems.

This series of reports, declarations, key stakeholders and events presents a partial history of the emergence of Sustainable Development in relation to education. However, the detail here enables an entry point to discuss how these discourses function as dominant ways of

knowing, governing and reporting on problems of class and gender inequalities, the needs of present and future generations, and the sustainability of human and non-human life on the planet. In the following discussion sections, I explore some of the theories and frameworks which structure these ways of knowing the future of the planet in relation to education.

Discussion: Governing the Problem of Young People and the Future of the Planet in Australia's Neo-Liberal Education Apparatus

As the first section of this chapter indicates, there has been significant work over the past five decades which has sought to name and know the future of the planet. Discourses of Sustainable Development, the UN General Assembly, UNESCO and other UN agencies, and the Australian Government's development and engagement with these discourses and agencies, provide examples of the contested and unstable narratives of the futures made knowable in this apparatus. Simultaneously, these are significant discourses in shaping young people and their futures in Australia's neo-liberal education apparatus. This section discusses some of the limits and possibilities for these ways of knowing the future of the planet in relation to young people and education, in three key sections.

First, I revisit a key moment in the discontinuity of an intergenerational ethic in the emergence of discourses of Sustainable Development. I engage with the work of Spijkers (2018), Carant (2017) and Urry (2016) in order to frame this element of the discussion, and to explore this silence. Second, drawing on the work of Lloro (2015) and Haraway (2016), I discuss some of the limits of the anthropocentric approaches to education which are produced and reproduced in Australia's neo-liberal education apparatus. In a final section, I discuss what collective youth movements such as the School Strikes for Climate (SS4C) and Friday's for Future (FFF) offer for unsettling and rethinking dominant, neo-liberal, anthropocentric discourses of the future of the planet. I also engage with the work of Haraway (2016) in order to frame these discussions.

Intergenerational Justice and Future Presents

In his book *The Age of Sustainable Development*, Jeffrey Sachs (2015) describes how an intergenerational approach, so significant in the work of the Brundtland Commission, has been replaced by a more normative approach to understandings of Sustainable Development. Sachs (2015, p. 3) suggests that "humanity is changing Earth's climate, the availability of fresh water, the oceans" and the habitats of other species. Sachs (2015, p. 3) suggests that these changes have reshaped the global ecosystems upon which life depends, making these changes "extremely dangerous and unprecedented in the span of humanity's 10,000 years of civilization". As Sustainable Development has emerged as a significant discourse in framing policies, programs and projects in addressing these challenges, a distinct shift had occurred in ways of understanding and defining Sustainable Development during the early 1990s, away from the intergenerational definition outlined in *The Brundtland Report* (1987) and *The Rio Declaration* (1992). Sachs (2015, p. 5) observes:

> This 'intergenerational' concept of sustainable development was widely adopted, including at the Rio Earth Summit in 1992. One of the key principles of the Rio Declaration was that 'development today must not threaten the needs of present and future generations'. Over time, however, the definition of sustainable development evolved into a more practical approach, focusing less on intergenerational needs and more on the holistic approach linking economic development, social inclusion, and environmental sustainability.

Through his work with the UN, Sachs has since "embraced" the "three-way normative framework" (2015, pp. 12–13) and claims that the question of Sustainable Development is today concerned with "how to take our knowledge of the interconnections of the economy, society, the environment, and governance and apply it to determine how to produce prosperous, inclusive, sustainable, and well-governed societies; that is, how do we achieve the SDGs?". Sachs' endorsement of the three-way normative framework is important given his status and influence as a key figure in shaping discourses of Sustainable Development

through his roles as President of the UN Sustainable Development Solutions Network, and Advocate for UN Secretary-General António Guterres on the Sustainable Development Goals (SDGs). Sachs has served as a Special Advisor to the UN Secretary General, and also held the position of UN Advocate for Sustainable Development when Ban Ki-moon was UN Secretary-General prior to 2016 (UCL, 2022, n.p.). Sachs is described as "a world-renowned professor of economics, leader in sustainable development, senior UN advisor, bestselling author, and syndicated columnist whose monthly newspaper columns appear in more than 100 countries" (UCL, 2022, n.p.).

Despite this discontinuity and erasure of an intergenerational ethic from discourses of Sustainable Development, the "three-way normative framework" has influenced and shaped a large number of policies, declarations, programs, the MDGs and SDGs, and their targets, and global, regional and national reviews of them. In 1994, Bob Jickling (1994), in his paper "Why I Don't Want my Children to be Educated for Sustainable Development: Sustainable Belief" (at the twentieth Annual Conference of the North American Association for Environmental Education), warns about the contested emergence of discourses of Sustainable Development as a way of knowing the future of the planet in relation to young people and education. From his standpoint in the 1990s, Jickling (1994, n.p.) argues that "as we enter the 1990s, this term [sustainable development] has become a vague slogan susceptible to manipulation", mostly because, of a "lack of attention to educational philosophy" informing environmental education. He suggests that the "proposed relationship between education and sustainable development, particularly as it is described in the phrase 'education for sustainable development' epitomizes a conceptual muddle that environmental educators ought to do something about".

By 2018, in "Intergenerational Equity and the Sustainable Development Goals", Otto Spijkers (2018, p. 10) states that the knowledge practices which underpin Sustainable Development, the SDG's and its relations to education, approach the earth as a "resource", "to be used by present and future people, and not as something warranting respect regardless of its worth to human beings". Spijkers (2018, p. 10) argues that "the main challenge is to find a proper balance between intergenerational equity – present and future people – and intragenerational equity – the rich and the poor of the present generation". Through analysis of UNGA resolution documents Spijkers (2018, p. 10) argues "that the protection of the earth is held to be important, not because we respect nature's intrinsic worth, but to allow it to serve as a resource for the development of human society, in the past, present, and future". Spijkers (2018, p. 10) identifies a tension "between intergenerational and intragenerational equity", and reflecting on some of the events and documents also discussed in this chapter, he asks:

> the Johannesburg Declaration tilted the balance in favor of *intra*generational equity, and the Rio+20 Summit tilted the balance back in favor of *inter*generational equity. Thus, what about the SDGs? Did they finally find a proper balance between the two? There is not a single explicit reference in the SDGs to 'intergenerational equity'; and references to rights and equity apply almost exclusively *intra*generationally. At the same time, the SDGs are, as the title suggests, all about sustainable development, i.e., about development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Sustainable development is the overall aim, and all SDGs should be interpreted and applied in such a way that they help achieve this aim [original emphasis].

Building on Spijkers analysis, both present and future generations of young people are not considered as stakeholders in shaping these futures, and/or in informing reviews of the goals, targets and the narratives mobilised in response to them, such as the Australian Government's voluntary review of progress towards the SGDs (AG, 2018b). At different times, and in different reports, however, the role of current generations of young people is identified. In the first instance, *The Rio Declaration* (UN, 1992, pp. 1–5), "Principle 21" states that "the

creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve Sustainable Development and ensure a better future for all". While *The Resolutions of the 37th session of UNESCO's General Conference on Education Beyond 2015* (UNESCO, 2013, p. 139) claims a "tipping point" had been reached, and argues for a "collective responsibility to meet the aspirations of youth".

As Urry (2016, p. 4) suggests, "most societal processes mould futures to the interests of current generations". As a way of unsettling these dominant approaches, Urry (2016, p.7) contends that we must acknowledge the "varied forms of time" across "different societies and social institutions" which are "built around contrasting time regimes". Urry (2016, p. 8) argues that standardised, universalised, "decontextualized and depersonalized" understandings of time, and discourses of futures, make it possible for futures to be "used and abused" "without feeling or remorse". This way of knowing the future as distinct from the present, and past, and "seeing the future as empty", as uninhabited, according to Urry, "makes it ready for exploitation since those in the future cannot get their own back for the future world that they will inherit" (Urry, 2016, p. 8).

Urry (2016, p. 8) urges us to examine "the dangers of extrapolating the future from what is present" and to acknowledge that "past, present and future are mutually intertwined". Barbara Adam's (2010a) distinction between "present futures" and "future presents" is particularly productive to return to here, as a way of noticing the lives of those unborn generations that will inhabit these futures, and also the ways in which universal, neo-liberal futures focused on competition and growth are disassociated from localised, embodied, and Indigenous knowledges. Adam argues (2010a, p. 369) that the problem with the standpoint of a present future is that "we treat the 'not yet' as a free resource base". As she (2010a, p. 369) suggests:

> After all, future generations cannot charge us for the use of their present. They cannot hold us to account if things go wrong with our exploitations. They have no voice or vote to register their concerns. In addition, the standpoint of present future is deeply embedded in the economic practice of discounting. This economic base principle ensures that any future present is devalued with reference to our present, since discounting works on the basis that the future is less valuable to us than the present.

As Adam (2010a) and Facer (2019) point out, a problem arises when the future is made knowable and governed as something that can been optimised and colonised as a resource for the inhabitants of the present. The question of "what are we doing to the future?" might be applied when considering the examples of the WEF's uncertain future of work and UNESCO's discourses of sustainable futures of the planet, as it has been made known in relation to young people and education. This question is important when considering the consequences of reproducing a "holistic approach" to the future of the planet which combines problems of economic development, social inclusion, and environmental sustainability. And in doing this, prioritise economic development in addressing the challenges and opportunities that these discourses identify.

The limits of these ways of naming and knowing futures has also become evident through different, localised experiences of the inequalities and injustices that the SDGs seek to manage. Christiane Struckmann (2018, p. 12), for example, has developed a postcolonial feminist critique of the 2030 Agenda for Sustainable Development in South Africa, and attests that the neo-liberal frameworks shaping the SDGs impede "gender justice and a better life for women on the ground", due to the neo-liberal and liberal frameworks which structure them. In this context, Struckmann (2018, p. 12) suggests that postcolonial feminism provides "an alternative (and superior) lens to not only better understand how power inequalities operate and manifest in gendered ways, but also to demand and effect real change through attention to local issues of agency and voice". Carant (2017, p. 34) similarly argues that as long as "the goals remain steeped in power-laden hegemonic frameworks, serving only as an

opportunistic medium through which power interests can assert, maintain and defend their position and preferred economic modalities, poverty eradication will remain relegated to the imagination". In order that the UN and related networks can actually "produce the transformational systemic shifts necessary for long-term, sustainable and equitable change for all", Carant (2017, p. 34) argues that there needs to be a shift of "decision making that is not limited to and imposed by the interests of powerful economic, patriarchal and political figures and nations".

This shift might entail a more diverse and inclusive network of elements in Australia's neo-liberal education apparatus, beyond the network of neo-liberal elites including, for example the UN, UNESCO, the WEF, the FYA, the OECD, the Mitchell Institute, Australian Federal, state and territory governments, ministerial councils, think tanks, and businesses which have a major share in shaping discourses about young people, education, skills and the future of the planet. In this shift there needs to be debates about moving from assembling "present futures" to "future presents", and for the re-emergence of an intergenerational approach to Sustainable Development, including the amplification of voices of diverse populations of young people, and Indigenous knowledges in different places, as what Braidotti (2013) would recognise as an "affirmative" starting point.

Anthropocentric Approaches to Young People and Education for Sustainable Development

In addition to a focus on current generations in shaping education in relation to Sustainable Development, UNESCO and related agencies have framed many of these policies, programs, pedagogies and interventions through an anthropocentric paradigm. As the examples from UNESCO's Education for Sustainable Development (ESD) in this chapter explicitly state, philosophical humanism is the dominant paradigm through which young people, education and the future of the planet is understood. There has been significant work over the past five

decades that has sought to name and know the future of the planet, in ways that differ markedly from the dominant discourses identified in this chapter. This section describes and engages with some of the limits of an anthropocentric paradigm for shaping the relations of power/knowledge/subjects in Australia's neo-liberal education apparatus.[47]

In UNESCO's pursuit of Sustainable Development, the goals, policies and programs that have emerged tend to reproduce understandings of the "human" and "nature" as separate, abstract concepts. In addition, "nature" is considered both as a domain that is outside or beyond the "human", and as a valuable "resource".

As I have demonstrated, in the *Hangzhou Declaration: Placing Culture at the Heart of Sustainable Development Policies* (UNESCO, 2013) "culture" was made knowable as a "driver and an enabler for sustainable development". These are important concerns and moments in the emergence of discourses of Sustainable Development; however, in Australia's neo-liberal education apparatus, there is a tendency toward amplifying the economic value, and capital-focused dimensions of these elements as they are reproduced and mobilised in different contexts.

[47] Broader literature which engages with discussions and critiques of an anthropocentric approach to education include Nathan Snaza's (2014, p. 26) "Toward a Genealogy of Educational Humanism". In addition, two edited collections: *Young People and Thinking Technologies for the Anthropocene* and *Young People and Stories of/for the Anthropocene* (Kraftl et al., 2022; Kelly et al., 2022) bring together scholarship from around the globe in order to engage with contemporary crisis and the problematic concept of the "Anthropocene" in relation to young people and education. This, and other work suggests that the contested concepts of the Anthropocene, the Capitalocene, the Chthulucene, or the Plantationocene, each provide different means to trouble anthropocentric discourses of present and future crisis of the planet. In this context, Haraway (2015, p.159) argues that the "constant question when considering systemic phenomena has to be, when do changes in degree become changes in kind, and what are the effects of bioculturally, biotechnically, biopolitically, historically situated people (not Man) relative to, and combined with, the effects of other species assemblages and other biotic/abiotic forces". Jason Moore (2016, pp. 5–6) has developed the concept of "Capitalocene", which he describes as "an ugly word for an ugly system", as it "signifies capitalism as a way of organizing nature – as a multispecies, situated, capitalist world-ecology". I return to these themes in a discussion of possible temporal and spatial scales used to imagine futures, in the Coda to this thesis.

Foucault's own genealogies engaged with the limits of these kinds of human-centred ontologies. In *An Interview with Foucault* in *Technologies of the Self*, Foucault (1988a, pp. 14–15) outlines concern with the values and ethos of "humanism":

> What I am afraid of about humanism is that it presents a certain form of our ethics as a universal model for any kind of freedom. I think that there are more secrets, more possible freedoms, and more inventions in our future than we can imagine in humanism as it is dogmatically represented on every side of the political rainbow: the Left, the Center, the Right.

Foucault was concerned with the ways in which the ontological conditions of "humanity" were produced through particular conceptions of freedom, autonomy and progress. He understood this approach as being ill-equipped to deal with the vast complexities, injustices and inequalities that shape human lives in different localities. In her work, Rosi Braidotti (2013, p. 60) built on Foucault's legacies, and those of Spinoza and Deleuze, and argues that humanism (or "anthropocentrism") is a problematic approach because it imagines "life" as something "codified as the exclusive property or the unalienable right of one species, the human, over all others or of being sacralized as a pre-established given". Braidotti's critiques of anthropocentric frameworks are productive here for considering the limits and possibilities of the forms of Sustainable Development in/for education produced in documents such as the *Incheon Declaration* (UNESCO, 2015a) and the differing and low levels of achievement across various nations in relation to the goals produced.

Braidotti's arguments highlight some of the limits of a "humanistic vision of education and development" produced in documents such as the *Incheon Declaration* (UNESCO, 2015, p. 7), and the transformation of "learning content and pedagogies, as well as for the role of teachers and other educators" in relation to this vision (UNESCO, 2015, p. 10). Along these lines of inquiry, my colleagues and I (Kelly, Goring & Noonan, 2021) argue that the contemporary discourses of Sustainable Development can, in this context, be considered as

an “oxymoron” in light of the apparently unquenchable globalisation of neoliberal forms of capitalism. In an era of discourses of Sustainable Development, fault lines of inequality, between rich and poor, the vulnerable and privileged, and the inability of governments to deliver on the SDGs has become even more evident (Haraway, 2016; Braidotti, 2019). This is despite intentions “inspired by a humanistic vision of education and development based on human rights and dignity; social justice; inclusion; protection; cultural, linguistic and ethnic diversity; and shared responsibility and accountability” (UNESCO, 2015, p. 7).

Anthropocentric paradigms which give shape to “present futures” through the dominant discourses of Sustainable Development, intersect with the government of young people and education in particular ways. Lloro (2015, p. 140), for example, examined how humanist paradigms are integrated into education, and how they “fail to consider how the nonhuman and material world co-shape our mutual worlds”. Lloro (2015, p. 136) maintains that a “Western”, humanist endeavour in education is defined by the “ontological dialectic of human/Other”, and this “serves not only to justify mastery over nature, but also to delegitimize particular Indigenous engagements with the cultural landscape”. Lloro (2015, p. 136) argues for the “transformative potential of Indigenous epistemologies and ontologies particularly with respect to rethinking notions of economic development and progress”. In subjugating Indigenous knowledges, the dominant, governmentalised approaches to the future of the planet, have, according to Annette Gough (2017) been shifting since the 1970s with the emergence of neo-liberal “bio-politics”. Gough (2017, p. 889) argues that this shift has been “from a goal of preserving the natural foundations of life to a focus on exploiting these foundations, modifying and transforming the environment through scientific and technological means”.

These changes can be traced throughout the ten-year period between the production of the *Melbourne Declaration* (MCEETYA, 2008) and the *Alice Springs (Mpartnwe) Declaration* (2019). The *Melbourne Declaration* (MCEETYA, 2008) describes the problem of climate change as a problem with global dimensions, one that poses unprecedented challenges, and requires countries to work together in new ways. This was a key element of the preamble to the declaration, alongside identifying futures (the twenty-first century) as being characterised by technological change and globalisation. According to the *Melbourne Declaration*, facing climate change would require forms of education and schooling, and the development of a particular type of young person, that enabled and encouraged engagement with "scientific concepts and principles" and promotes creative forms of "problem-solving" (MCEETYA, 2008). However, as my colleague and I have discussed (Noonan & Goring, 2022) during 2018 and 2019 the engagement by many young Australian's in collective movements such as the School Strikes for Climate and Fridays for the Future protests and climate justice movements, was condemned by many conservative politicians, including Scott Morrison, Australia's Prime Minister during the years leading to the publication of the *Alice Springs (Mpartnwe) Declaration* (2019). By the time the *Alice Springs (Mpartnwe) Declaration* (Education Council, 2019) was produced, all mention of the environment, of climate change, and any reference to the entanglements and relations between human economic, educational, political and social systems and the sustainability of life on the planet, had been erased.

In 2020, the United Nations Development Programme (UNDP) produced a report titled *The Next Frontier: Human Development and the Anthropocene* (UNDP, 2020). This report is signed by UNDP Administrator Achim Steiner and is framed by the emergence of the COVID-19 pandemic. Steiner's (UNDP, 2020, p. iii) words appear to acknowledge the trajectories of a human-centred approach to development and growth, and for rethinking the relationships between humans and the planet in the face of profound crisis:

> The climate crisis. Biodiversity collapse. Ocean acidification. The list is long and growing longer. So much so that many scientists believe that for the first time, instead of the planet shaping humans, humans are knowingly shaping the planet.
>
> […] the pressures we exert on the planet have become so great that scientists are considering whether the Earth has entered an entirely new geological epoch: the Anthropocene, or the age of humans. It means that we are the first people to live in an age defined by human choice, in which the dominant risk to our survival is ourselves. Advancing human development while erasing such planetary pressures is the next frontier for human development. To survive and thrive in this new age, we must redesign a path to progress that respects the intertwined fate of people and planet and recognises that the carbon and material footprint of the people who have more is choking the opportunities of the people who have less.

In 2020, the UNDP (2020, p. iii) was calling for global and national governments, organisations, businesses and communities to act on these problems in ways that account for the entanglement, the "intertwined fate" of humans, non-human species, economic and technological development. Along with my colleagues, Peter Kelly and Meave Noonan, we (Kelly et al., 2021, p. 186) have discussed the possibility of thinking beyond an "anthropocentric world inhabited and populated by humans – children, young people, adults" and to account for the "non-sociological world" which is "much more bio-diverse, and richly populated with non-human Others".

I have highlighted some of the limits of an anthropocentric approach to Sustainable Development and education. In this context, post-anthropocentric, post-human ontologies can be productive for rethinking these approaches to futures making. Donna Haraway (2016, pp. 1–4) asserts that we need to "stay with the trouble" in the contexts of the crises of capitalism and the climate. This "staying with the trouble", "requires making oddkin; that is, we require each other in unexpected collaborations and combinations […] We become with each other or not at all". In these times (pasts, presents, futures) of crisis we need to "make kin in lines of inventive connection as a practice of learning to live and die well with each other in a thick present" (Haraway, 2016, p. 4). In the last five years, many young and old people across the planet have been protesting the current "path to progress" and have acknowledged the

"intertwined fate of people and planet" (UNDP, 2020, p. iii) in the present through collective action.

Youth Collectivities in/for the Anthropocene

In understanding these challenges in a different way, millions of young people across the planet have been calling for governments and businesses to take action on climate change. Movements such as the School Strikes for Climate (SS4C) and Fridays for Future (FFF) have been challenging the current trajectories of a neo-liberal version of capitalism by "striking from school to demand that our politicians take our future seriously and treat climate change as what it is: a crisis" (SS4C, 2022, n.p.). The entanglement of generations, technologies, and material and discursive elements in youth collectivites such as the SS4C, name and know these planetary crisis in ways that differ markedly from the dominant relations of power/knowledges/subjects that I have discussed and analysed in this chapter. These ways of knowing challenge current trajectories of governing futures which seek to defer action on the climate crisis, and demand collective action in the present.[48]

On 20 August 2018 in Stockholm, Sweden, the then-15-year-old schoolgirl Greta Thunberg, first staged a solo protest outside the Swedish parliament, to draw attention to adult inaction in relation to the climate crisis. Her protest was inspired by the actions of students at Marjory Stoneman Douglas High School in Parkland, Florida, who walked out of classes in protest against US gun laws – laws that contributed to the killing of 17 people on their campus on 14

[48] During the course of this project I have co-authored a number of book chapters about these collective movements. See, Noonan and Goring (2022) titled "Confident, creative and enterprising young people? The school strike for climate and lessons for Australian education" and Kelly, Goring and Noonan (2021) titled "School strikes for climate: Young people, dissent and collective identities in/for the Anthropocene" from the edited collection *Youth Collectivities: Cultures and Objects*. Elements of this work have also been developed into a book chapter written by Peter Kelly, Seth Brown and myself, titled "Young People, the Anthropocene and the Promise of Sustainable Futures: Rethinking Learning at the Convergence of the 6th Mass Extinction and the 4th Industrial Revolution" for the *Handbook of Children & Youth Studies* (Kelly, Brown & Goring, 2023). The discussion that follows draws on some of the themes and concepts in that published work.

February 2018 – and staged a "March For Our Lives" (Watts, 2019a; 2019b). Many SS4C protests have followed Thunberg's initial strike. Global strikes took place in March and May 2019, with the largest held during the "Global Week for the Future" on 20 September 2019, involving around four million protesters around the globe, many of them schoolchildren (Watts, 2019a). The global climate strike that Greta Thunberg inspired has grown to include hundreds of thousands of students, young, and old people in more than 100 countries. At the end of her TEDx talk in 2018, Greta Thunberg (2018) declares that:

> Today we use 100 million barrels of oil every single day.
>
> There are no politics to change that.
>
> There are no rules to keep that oil in the ground.
>
> So, we can't save the world by playing by the rules because the rules have to be changed.
>
> Everything needs to change
>
> And it has to start today.

As my colleagues and I have discussed in greater detail elsewhere (Kelly, Goring & Noonan, 2021), Thunberg has come to function as a figure of the current climate protest movement comprised of dispersed and diverse elements. Since the start of 2019, she has addressed various forums including the World Economic Forum at Davos in 2020, calling for action to address the multiple crises of earth systems, beyond the "business-as-usual" approach that has dominated contemporary politics. Thunberg has also become the target of criticism. For example, Conservative Australian commentator Andrew Bolt (2019, n.p.), describes her as "the deeply disturbed messiah of the global warming movement". In response to Thunberg being named *Time*'s Person of the Year in 2019, then US president Donald Trump tweeted: "So ridiculous […] Greta must work on her anger management problem, then go to a good old fashioned movie with a friend! Chill Greta, Chill!" (Taylor, 2019, n.p.).

Thunberg has also been dismissed by some politicians and commentators by commenting, on her age, her gender and her mental wellbeing (Alter et al., 2019). Thunberg, and the SS4C movement's understanding of the present and future is one characterised by climate crisis and she and many other young climate activists across the planet, have demanded that their governments, institutions and business take greater responsibility and action in response to these crisis. These collective movements imagine presents and futures in crisis, and seek to disrupt dominant trajectories of unsustainable and anthropocentric notions of growth, and frameworks which treat nature as a resource.

The voices of politicians in power in these contexts makes visible the political investment of many global governments in silencing young people who are bravely protesting the unsustainable, individualising trajectories of neo-liberal capitalism I have identified in this thesis. My colleague Meave Noonan and I (Noonan & Goring, 2022) have suggested that these collective forms of dissent enable young people to be confident, creative, courageous, enterprising and resilient in a manner that challenges dominant discourses of twenty-first century skills such as creativity, enterprise and aspiration for the future. These movements demonstrate how young people can push back against neoliberal, globalised capitalism through forms of dissent that allow them to participate in social change.

Bradshaw et al. (2021) echo these ways of knowing the present and the future in crisis. Bradshaw et al. (2021, p. 1) argue that "humanity is causing a rapid loss of biodiversity and, with it, Earth's ability to support complex life". They observe that despite the fact that "solutions abound", the current scale of their implementation does not match the relentless progression of "political impotence", "climate disruption", "failed international goals and prospects for the future", the "sixth mass extinction" and "biodiversity loss". In the face of

these crisis, Bradshaw et al. (2021, p. 2) argue that attention needs to be focused on "Changing the Rules of the Game":

> The gravity of the situation requires fundamental changes to global capitalism, education, and equality, which include *inter alia* [original emphasis] the abolition of perpetual economic growth, properly pricing externalities, a rapid exit from fossil-fuel use, strict regulation of markets and property acquisition, reigning in corporate lobbying, and the empowerment of women. These choices will necessarily entail difficult conversations about population growth and the necessity of dwindling but more equitable standards of living.

Bradshaw et al. (2021, p. 6) echo the SS4C and FFF's hopes and action for "interventions to prevent extinctions, restore ecosystems, and encourage more sustainable economic activity at both local and regional scales" in the present and the future. Drawing on various sources, including Ceballos et al. (2015), the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES) (2019), the Convention on Biological Diversity, (2020), and the WWF (2020), they argue that "the mainstream is having difficulty grasping the magnitude of this loss, despite the steady erosion of the fabric of human civilization". Global intergovernmental bodies such as the UN and UNESCO, and also the WEF and OECD have increased attention to these problems, particularly in the context of the COVID-19 pandemic.

To ensure the sustainability of life on the planet for future generations, a starting point, for Haraway (2016, p. 4), is to take account of the "entanglements" among "the inhabitants of the world, creatures of all kinds, human and non-human", to make "oddkin", to forge new connections, relationships, and communities. Making "oddkin" for Haraway (2016) is an "antidote" to the isolated, autonomous, individual self that Australia's neo-liberal education apparatus invests in so heavily (Kelly et al., 2019).

Those young and old people involved in the SS4C and FFF movements illustrate how being "truly present" (Haraway, 2016, p. 1), entails confronting the "overwhelming challenges

ahead" while being brave enough to "tell it like it is" (Bradshaw et al., 2021, p. 6). For those dominant elements and relations in Australia's neo-liberal education apparatus this might mean, shifting from the contemporary obsession with the production of a future characterised by "uncertainty, acceleration and fragmentation" (Leccardi, 2005, p. 123), and to acknowledge that the future is "the virtual unfolding of the affirmative aspect of the present, which honours our obligations to the generations to come" (Braidotti, 2013, p. 192).

Interlude – Astrid's Story

Astrid's story was also first published in a paper titled "COVID-19 and young people's 'Future Presents': lockdown stories from the Anthropocene", in the *Journal of Youth Studies* (Kelly, Brown & Goring, 2022a).

As I have already indicated, our intent in that paper was to situate the pandemic, the social, cultural, economic and political responses to the pandemic, and the challenges and opportunities that this public health crisis produces for young people's health and wellbeing, their education, training and employment pathways, and their sense of belonging, connectedness, even community, in the broader, unfolding crises of global capitalism, of earth systems, and of bio-diversity that is heralded by the Anthropocene (Haraway, 2016).

In developing that argument, we drew on some of the outcomes of a place-based scenario planning project in Melbourne's (Australia) inner northern suburbs that was undertaken in the last half of 2020. The project, titled "COVID-19 Recovery Scenarios for Young People in Melbourne's Inner North", was a collaboration with the Inner Northern Local Learning Employment Network (INLLEN) and its Inner North Youth Employment Taskforce (INYET). As part of that project, we used a video-capture platform (Video Ask) to conduct video interviews with 53 young people during what became an extended second lockdown period in Melbourne as the city dealt with a resurgence in COVID infections during August–November 2020. The project was shaped by a scenario planning methodology and had a future orientation to the year 2025. In that paper we presented the stories of three young people from the midst of Melbourne's second lockdown. In that context, we suggested that these stories were meant to be illustrative and inclusive – but not representative – of some of the concerns, anxieties, uncertainties, and hopes that young people in Melbourne's inner

north gave voice to when we provided them with an opportunity to reflect on and respond to questions about their presents and futures.

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Astrid was 19 years old and living in social housing in Fitzroy, in the Yarra LGA, with her mum and her kitten. She was passionate about design, art, and music, and was studying a bachelor of industrial design at a dual-sector TAFE/university. During the lockdowns Astrid was unable to see her boyfriend and his family who lived in a neighbouring suburb, or her dad, who lived in Canada:

> It's been really hard.
>
> My mum's Scottish and she emigrated to Australia when she was ten with her family. She lived in Perth when she was younger and then moved to Melbourne to pursue arts – she is a musician. And so when I was really little I went on tour with her and I didn't get to hang out with other kids. So, I think I get on a lot better with adults than I do with other kids my own age.
>
> And my dad's Canadian, he was from Vancouver […] he moved back to Vancouver when I was in year 10. And he's recently engaged, and I'm so excited, but I don't know when I will be able to attend the wedding.

Astrid has also faced a number of challenges in finding employment and navigating study due to her dyslexia:

> I didn't ever have work really. I didn't apply for work when I was in VCE because I'm dyslexic and it was just going to be too much to get through VCE and get a good score, and also have a job.

Astrid's interview was characterised by her humour, her keen sense of irony, and her attempts to be direct about the effects of lockdown on her health and wellbeing and learning:

> I can't think about any of it too much. Or it feels like you just can't function in your daily life.
>
> Teachers are like, oh, how can we help? What can we do to make this easier? It's like, in terms of resources – nothing, because, anything that is dependent on being in

> person cannot be done anymore, and anything like digital resources, we've got those and we know how to use them better than you guys do.

When asked to expand on the ways in which she imagined the world in 2025, Astrid spoke with a deep concern about the climate crisis, and the protests and social unrest so evident in early 2020. She was uncertain and anxious about whether things would get "better or worse", and was profoundly frustrated with Australian governments. She saw herself as more responsible and truthful than the politicians that seemed incapable of grasping "preschool concepts" such as climate change:

> It feels like politicians don't get that if you destroy the planet, you also destroy humanity.
>
> I don't want to be 80 and living in a dead world.
>
> I hope, my biggest hope is that they figure out how to deal with climate change. Oh, no, I take that back. They know how to deal with climate change. I hope that they do it.
>
> I hope for a better world. And that hope for a better world unfortunately feels like it's being overshadowed by the knowledge that most people who are in charge don't give a shit about everyone else. And so yeah, I don't think I feel particularly confident because it feels like a pipe dream.

At the same time as she felt despair in relation to the uncertainty and inaction in relation to these multiple crises, Astrid had a sense, indeed she hoped, that COVID-19 had "changed everything", and was "excited and hopeful" about the possibility that the pandemic presented an opportunity for a more just future:

> Maybe I don't want it to go back to normal, but I want it to feel good.
>
> I also hope that the people who are running the community make note of the fact that young people want more involvement in it. And a place where they feel that they can be themselves.

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Along with many other young people, Astrid was supported by a local youth service provider to participate in the project. Her story provides a way to reflect on the entanglement of young

people's sense of their futures with wider concerns about the pandemic, the climate crisis, education, training and employment pathways, online learning and a mistrust of, even anger with, adults, and adult institutions, and their apparent unwillingness to make more sustainable futures. Astrid's story and the hopes, anxieties, despair and angst that she shared, provide a means for us to reflect on the kinds of presents and futures made absent in this education apparatus.

Astrid's story can also enable us to speculate about the kinds of processes and forms of participation and story telling that young people might engage with, in particular places, and particularly in times of crisis. In telling her story, Astrid avoided "sugar-coating the overwhelming challenges ahead" and instead was brave enough to "tell it like it is" (Bradshaw et al., 2021, p. 6). Her words echo and reference the language used by many young climate activists participating in global movements such as SS4C and Fridays for Future. In this sense, her story urges us to consider the intersections between gender and class with youth voice and political participation programs, and young people's activism. In 2020, Astrid clearly felt that her voice was not being heard or taken seriously by adult institutions, local and federal governments.

In *Youth rising?: The politics of youth in the global economy*, Mayssoun Sukarieh and Stuart Tannock (2014, p. 143) reflect on the problematic character of youth voice and participation in movements against such things as the climate crisis, war, and racism, and their encounters with the institutionalised promise of "youth participation":

> In many of these movements…young participants are quite likely to find themselves not embraced by the youth voice, youth participation and youth empowerment forums and frameworks that are now being promoted by global elites and their representative organizations, but rather to be standing on the outside, having to fight hard and shout loud for a hearing for the alternative futures that they are struggling collectively to win.

Drawing on Sukarieh and Tannock's (2014) work, Astrid's story speaks to the challenges that come from listening to and trying to understand the concerns that many young people have about "having a voice" and what it means to have that voice "listened to" and "acted upon" in spaces, and by people who can impact the circumstances that shape their lives. Many young people, including Astrid, have significant contributions to make to the production of knowledges about the urgent crisis of the present and the future, and knowledges about the local and embodied effects of global crisis. Her story can provoke us to speculate about the ways in which diverse populations of young people can be better supported to engage in socially just and sustainable processes of youth participation, voice and activism.

Coda

This coda has a number of purposes. The first is to revisit the genealogical questions and research aims set out in the Introduction to this thesis, and which were addressed in greater detail in Parts One, Two and Three, and to summarise the ways in which I have addressed these aims. The sections in this Coda are structured around each of these research aims. These sections include summaries of the silences, absences and subjugated knowledges that have been identified and analysed in the emergence of Australia's neo-liberal education apparatus, and those discourses that suggest that young people should be and become enterprising and aspirational in/for uncertain futures of work and the planet.

In the final section of this Coda, I revisit some of the possibilities that feminist, post-humanist ontologies and tools present for rethinking the dominant relations of power/knowledge/ subjects that are produced and reproduced in neo-liberal governmentalities. In particular, I engage with the work of Rosi Braidotti and Donna Haraway, and consider what discourses of affirmative politics, entanglement and "speculative fabulations" (SFs) can offer for rethinking the dominant relations of power/knowledge/subjects which structure Australia's neo-liberal education apparatus. Drawing on the work of Phillip Vannini (2015) and Julia Coffey (2022), and Rosie, Chloe, Michael, Ruth, Ash and Astrid's stories, I conclude this Coda with a discussion about the possibilities that non-representational approaches and affective entanglements offer for rethinking these relations.

At the beginning of this thesis, I set out one general, genealogical question:

> What are the conditions of possibility that enable discourses of twenty-first century skills to function as powerful truths in constructing the problem of educating contemporary populations of young people in relation to uncertain futures?

Chapter One, Part One introduces the approach and tools taken to address this genealogical question. This analysis of the conditions of possibility that enable discourses of twenty-first century skills to function as powerful truths in/for uncertain futures has been developed along three interrelated axes of power/knowledge/subjects. Through discussions of Michel Foucault's own genealogies and tools, I outlined various ways of knowing practices of sovereign, disciplinary, and governmental forms of power, and the ways in which particular apparatuses condense elements and reproduce these forms and relations of power through strategic relations. I outlined the key conceptual tool of apparatus (*dispositif*), which was used throughout this research as a way of analysing the complex, dispersed, but strategically related, elements and networks which circulate and reproduce particular discourses. I described how analysis of this apparatus, and its elements, enable thematic discussions about dominant relations of power/knowledge/subjects, and the "marginal", "disqualified", subjugated knowledges, silences and absences that are part of this apparatus (Foucault, 1997b, p. 8; Law, 2004).

Chapter Two is an archaeological account of a series of key events in the emergence of Australia's neo-liberal education apparatus. It argues that over the past five decades, in Australia and in relation to a global network of organisations, businesses, and governments, a significant suite of declarations, policies and programs have emerged which are aimed at "fixing" the "problem" of young people's skills in relation to flexible, globalised, automated and uncertain presents and futures. The *Hobart*, *Adelaide*, *Melbourne* and *Alice Springs (Mparntwe)* declarations, and related reports including *Australia Reconstructed* and the *Finn*, *Mayer* and *Carmichael* reports, provide key events through which to describe the changes occurring in Australian education, training, youth and labour market policy between the 1980s and the 2010s. I argued that this assemblage of elements, events, discourses and actors, can be understood as seeking to know and govern young people, education and futures in

ways which can meet the strategic aims, needs and logics of neo-liberal governmentalities. From this initial narrative, I identified two key elements in this apparatus for genealogical analysis. They are the "subjects" of this education apparatus (young people), and the "objects" of this education apparatus (futures). These two key elements inform the production of Part Two and Part Three of the thesis, and also structure my responses to the key research aims.

Throughout Part Two and Three, in addressing this broad genealogical question, I identify and analyse some of the relations of power/knowledge/subjects that I identify as being critical to the operation of dominant discourses of young people, education, twenty-first century skills and futures. In order to demonstrate that this apparatus and these discourses are always mobile and unstable ways of knowing and governing, I identify a series of key themes as discussion points in those four chapters (Foucault, 1997a). These are revisited in detail in the following sections. The aim of these discussions, in addressing this genealogical question, was to produce a history of twenty-first century skills that is both critical and effective. As Maria Tamboukou (1999, p. 210) argues, "a history renders itself effective when it develops the ability to distinguish singularities, acknowledge differences, decentre man [sic] as the subject of historical becoming and shatter the certainties of our very existence".

Taking a series of Australian national education declarations, and the work of the FYA, WEF, OECD and UNESCO as entry points to discussions about the character of education in neo-liberal capitalist economies, I sought to unsettle the certainties about young people and their futures that they produce (even if that means unsettling the certainty of an uncertain future!). An analysis of discourses of twenty-first century skills, and of the figures of enterprising and aspirational young people, provided ways of identifying and troubling the dominant ways of knowing and governing neo-liberal subjects in/through education. In the

same way, identifying and critiquing discourses of the Fourth Industrial Revolution and an uncertain future of work, and of Sustainable Development and the future of the planet, provided ways of analysing the dominant ways of knowing and governing futures in/through education and in relation to young people's skills.

Throughout this thesis I have taken these discourses of young people, twenty-first century skills and uncertain futures as something that "appears (seems, feels) normal or true (commonplace, natural, intuitive)", and ask "how it came about in the light of contingency and power" (Vucetic, 2011, pp. 1301–1302). For Foucault (1997b, p. 10) the project of making "disorderly and tattered genealogies" is to bring into play "desubjugated knowledges" and to "reactivate local knowledges". In this Coda, I revisit how I have addressed these aims and provide some "speculative fabulations" and discussion about what might come next.

The Emergence of Australia's Neo-Liberal Education Apparatus

> First Aim: To identify and analyse the knowledges that are made present and absent in Australia's neo-liberal education apparatus that identifies twenty-first century skills as promising to provide the solution to the problem of educating contemporary populations of young people in relation to uncertain futures.

Chapter Two tells a story about the emergence of Australia's neo-liberal education apparatus in Australia, and some of the key elements that have been made present, absent, amplified, silenced and subjugated in that apparatus. I structured this work around a narrative about four key education and schooling declarations published between 1989 and 2019 in Australia including the *Hobart*, *Adelaide*, *Melbourne* and *Alice Springs (Mparntwe)* declarations. This chapter enabled me to identify and introduce the general character of this apparatus, and to describe the global and national, intergovernmental, and non-government organisations and other third sector economic and social policy organisations and events that are key elements

in this apparatus. I describe how discourses of uncertain futures of precarious work, technological development, globalisation, automation, and the twenty-first century had been produced as dominant ways of knowing and governing futures in relation to education in Australia since the 1980s. I analyse how twenty-first century enterprise skills emerged in relation to histories of youth skills, capability, and competency discourses as a way of re-regulating the individual responsibilities of young people and teachers against the backdrop of neo-liberal labour market deregulation. I argued that the dominant discourses of competency, capability, employability skills, confident and creative young people, could productively be understood in terms of the neo-liberal problematisation of liberal welfare government. I suggested that Australia's neo-liberal education apparatus functions through a strategic network of relations which amplify the voices of corporate stakeholders, while silencing those of workers, unions and young people. I signal the limits of governing young people, education and futures through market-oriented logics of neo-liberal governmentalities focused on human capital, productivity, competition, profit and unsustainable growth. In addition, I argue that discourses of twenty-first century skills, as strategic elements in this apparatus, are ways of visiting the burdens of a free-market, neo-liberal capitalist economy on young people, their teachers and schools.

Young People and Twenty-first Century Skills

> Second Aim: To identify and analyse the relations of power/knowledge/subjects that shape those discourses that suggest that young people need to be educated to become enterprising and aspirational in relation to uncertain futures.

Part Two: Educating Enterprising and Aspirational Young People introduces some ways to think sociologically about young people as subjects. These tools include such things as Donna Haraway's (2016) "figures", which have been developed in different ways by Steven Threadgold (2020), Peter Kelly's (2000) concept of "artefacts of expertise", and Esther

Faye's (1991) work on "governmental fantasies". Each of these tools provide different, yet related ways of understanding the ways in which young people are made knowable as subjects, and governable in relation to different problems.

Drawing on this work and the concept of "figures", in Chapter Three: Being and Becoming an Enterprising Young Person, I develop a genealogical analysis of the conditions, limits, and possibilities of knowing and governing young people as needing to be and become enterprising. I suggest that the Foundation for Young Australian's (FYA) *New Work Order* report series provided a productive entry point to discussions about the role that disciplinary relations of power/knowledge/subjects play in shaping discourses of enterprise. I argue that this apparatus, and this idealised figure of enterprising young people is made possible through "diving practices" of disciplinary power/knowledge which aim to disaggregate, disassociate and disembody young people as subjects of these discourses. I also analyse the role of the psych-disciplines in the historical production of individualising and normalising knowledges of young people, and the subjugation of knowledges of inequalities and dimensions of genders and sexualities, class, disability, neurodiversity, ethnic, and racial background, place or geography, culture or social context. Finally, I argue that, in Australia's neo-liberal education apparatus, discourses such as enterprise skills, produced through dispersed networks of corporate elites, policy think tanks, and nongovernment organisations, gain authority through the visualisation of particular knowledges, a process which makes absent the data that informs them. These particular visualisations of young people, I suggest, assume, value and seek to reproduce the discourses which privilege the behaviours, places and bodies which have been historically dominant in scientific knowledge production.

Kirk and Spiller (1994, p. 85), drawing on Foucault's work on disciplinary practices and schooling, contend that state regulated, compulsory schooling systems have for a long time

(much longer than this neo-liberal epoch) been interested in producing discourses of childhood and adolescence in which the body is understood as something that could be considered as "separate from thoughts, feelings and experiences", so that these bodies could be "studied, analysed and subjected to various treatments and regimens". Alternatives to these ways of knowing who/what young people are and can do in relation to the future might be better understood in terms of the complexities, and imperatives producing new positions of marginality and privilege in relation to place attachment, mobility and discourses of cosmopolitanism, as Farrugia (2016 & 2019), for example, has explored with young people in regional Australia. Young people's voices, and the complexities and messiness, hopes, aspirations, despair, anger, angst and anxieties which characterise their presents and futures might be taken seriously in taking account of these positions, and in rethinking dominant discourses.

Chapter Four: Being and Becoming an Aspirational Young Person describes how young people's orientations to the future, their aspirations, are made knowable and governable in Australia's neo-liberal education apparatus, in relation to particular understandings of the jobs of the future. That chapter analyses the OECD's (2020) *Dream Jobs?* report and discussed how deficit models of young people's skills persist as frameworks for intervening in dimensions of disadvantage and marginalisation from education, training and work. It discusses how these discourses function as a moral obligation for young people to better align with futures that have been named and known by networks of global education policy makers, organisations, government, and businesses in this education apparatus. I suggest that these technologies of government, and discourses of alignment and misalignment are made possible due to assumptions about an accelerating, and uncertain, linear arrow of time, which subjugates knowledges about multiple ways of knowing the entanglements of pasts, presents and futures, localised knowledges, and Indigenous knowledges. I also explore the

possibilities that Arjun Appadurai's (2004) concept of "capacity to aspire", and Rosi Braidotti's (2019) understanding of an "affirmative ethics" present for highlighting the limits of dominant discourses of aspiration, and for developing different ways of knowing young people's being and becoming within the socio-ecologies that they live.

Donna Haraway (2016, p. 31) states that "Nobody lives everywhere; everybody lives somewhere. Nothing is connected to everything; everything is connected to something". The problem of what young people should be and become in/for the present and the future, is entangled in/with the crisis of capitalism as "earth system", and the reproduction of precarious work, economic instability, marginalisation and disadvantage, and environmental crises (Moore, 2015). In taking a different approach to linear, individualising, deficit models of aspiration, young people's temporal orientations might be better understood as entangled in/with these crisis at different scales and in different places. As Stacy Alaimo (2012, p. 476) argues:

> As the material self cannot be disentangled from networks that are simultaneously economic, political, cultural, scientific and substantial, what was once an ostensible bounded human subject finds herself in a swirling landscape of uncertainties where practices and actions that were once not even remotely ethical or political matters suddenly become so.

Instead of reproducing dominant, neo-liberal discourses of the individually responsible, choice-making and autonomous subject, Braidotti (2019, p. 122) suggests that a post-anthropocentric subjectivity, a "transversal subjectivity" will require a "radical relationality, aiming at empowerment", and an "affirmative ethics". Braidotti (2019, p. 122) indicates that "this means increasing one's ability to relate to multiple others, in a productive and mutually enforcing manner, and creating a community that actualizes this ethical propensity". Instead of reproducing conditions for the production of a "depthless, flexible, lonely, responsive and responsible learner (collectively represented as human capital), devoid of 'sociality'" (Ball,

2009, p. 213), or for the reproduction and development of the "behaviour economy" (Zuboff, 2019, p. 39), Braidotti (2019, p. 130) argues that we should not give in to a "weakening of the desire to act" which "often feeds an appeal to external powers to take over the task of organizing how to live our lives". In this context, Braidotti calls for, and acts towards, a "desire to persevere in living, against all odds", which would require "a higher form of self-knowledge" and "understanding of the nature of one's affectivity" (Braidotti, 2019, pp. 124–125).

Young People, the Fourth Industrial Revolution and Sustainable Development

> Third Aim: To identify and analyse the relations of power/knowledge/subjects that shape those discourses that suggest that young people need to be educated in relation to the uncertain futures of the Fourth Industrial Revolution and Sustainable Development.

Part Three: Educating Young People in/for Uncertain Futures explores how global organisations such as the OECD, WEF, UN and UNESCO sought to produce and reproduce discourses of uncertain, flexible, globalised, digitally disrupted futures. It analyses how an assemblage of strategic relations, reporting mechanisms, connections, knowledge flows, reports and discourses enable these particular futures to function as powerful truths in Australia's neo-liberal education apparatus. In the Introduction to Part Three I outlined sociological work which has been productive for thinking about the reality status of the future, and in particular, Barbara Adam's (2010a, p. 362) conceptual distinction between "present futures" and "future presents".

Drawing on these tools, in Chapter Five: The Future of Work: Educating Young People in/for the Fourth Industrial Revolution, I introduce, describe and analyse the WEF's *Future of Jobs* report series (2016; 2018; 2020) and related key concepts. Chapter Five traces some of the policy documents which have contributed to the material and discursive formation of

discourses of flexible work, automation and the Fourth Industrial Revolution in relation to young people, education, and skills. I chose these discourses, organisations and documents because they also play a significant role in shaping the subjects of these futures in Australia's neo-liberal education apparatus. This chapter discusses how a crisis of precarious work and uncertainty is produced and reproduced in order to meet the needs and aims of key stakeholder networks in this education apparatus. It argues that within this apparatus, knowledges of the trajectories of neo-liberal capitalism in terms of a crisis of precarious work (Cook et al., 2021), patterns of discrimination and exclusion (Braidotti, 2019), and the far-reaching and scarring effects of unemployment on young people are made manifestly absent from discourses of young people, education and futures. I argue that universalised discourses of the future are implicated in the reproduction of economic and technocentric models of development and growth in Australia's education apparatus. I suggest that more complex, place-based, and embodied understandings of the entanglements of young people's health and wellbeing, identity negotiations, and hopes for the present and the future are necessary in order to think differently about these relations of power/knowledge/subjects. I argue that the production of a future made knowable as uncertain, is implicated in the reproduction of cycles of disadvantage, and reinforce and legitimise the individualising discourses of twenty-first century skills, enterprise and aspiration that emerge in this education apparatus.

Chapter Six: The Future of the Planet: Educating Young People in/for Sustainable Development examines a series of policy documents and reports which have been significant over the last five decades in the emergence of discourses of Sustainable Development and/in relation to education. That chapter traces the emergence of the concept of Sustainable Development in relation to education through a series of policy documents, reports, declarations, and key political and academic figures. These include the United Nations *Sustainable Development Goal 4 (SDG4) Ensure inclusive and equitable quality education*

and promote lifelong learning opportunities for all (2015), *The Brundtland Report* (1987), *The Rio Declaration* (1992) and *Agenda 21* (1992), *The Millennium Development Goals* (2000), the *Decade of Education for Sustainable Development (2005–2014)* and *The Future We Want* (2012), the *Hangzhou Declaration* (2013), the *Muscat Agreement* (2014), the *Incheon Declaration* (2015a), and the *5-Year Progress Review of SDG4 – Education 2030 in Asia-Pacific* (2021). Drawing on these examples, I describe how intergenerational justice, and the inhabitants of the future present have been made absent from dominant discourses of the future of the planet. I discussed how a distinctly anthropocentric approach to Sustainable Development and related education policy has emerged during the past five decades. Drawing on Braidotti (2019) and other work in this space, I discussed the limits of an anthropocentric approach to education and examine the possibilities that a post-human, affirmative ethics presents in this context. I also provided examples of youth collectivites, such as the SS4C and FFF, and suggest that these movements present different ways of knowing and acting in/on the present and/in relation to the future of the planet, which seek to challenge the dominant logics of neo-liberal capitalism.

Braidotti's (2013) work provides a way to consider what relations of power/knowledge/subjects might give shape to socially just and sustainable presents and futures. Walsh and Black (2022, p. 107) describe the ways in which conditions of uncertainty may be "perpetuated in the interests of the powerful to keep wage levels low", to keep "young people busy focusing on the present while forgoing the idea that the future can be actively created". Braidotti's (2019, p. 117) approach presents a challenge to these dominant, neo-liberal discourses of a knowable, techno- and anthropo- centric future which "perpetuates patterns of discrimination and exclusion". These dominant discourses of the future are produced through "a local and global politics whereby small numbers of elites, often consultants from faraway places, make decisions that have very localised effects on the types

of access people have with educational practice" (Duggan, 2019, pp. 124–125. See also, Robertson, 2021; Facer 2016; 2019).

Braidotti (2013, p. 185) suggests that the future might be understood as "nothing more or less than inter-generational solidarity, responsibility for posterity". Braidotti (2013, p. 185) argues that a "yearning for sustainable futures can construct a liveable present. This is not a leap of faith, but an active transposition, a transformation at the in-depth level", "rooted in the ordinary micro-practices of everyday life", "aimed at the affirmation of hope" and making "sustainable transformations" (Braidotti, 2013, p. 192). In terms of the relations between dominant, neo-liberal futures and the purposes of education, Keri Facer and Arathi Sriprakash (2021) present some of the limits of an institutionalised, formalised, standardised, and universalised discourse of human capacities to "anticipate" and in relation to an optimised, colonised and contingent future (Facer, 2019, p. 5). Facer and Sriprakash (2021, p. 8) offer the possibilities of an "emergentist" philosophy which would involve "ontological understanding of education as a practice of collective inquiry and co-emergence – rather than with the desire to create an ideal 'futures literate' student". From an "emergentist" perspective, Facer and Sriprakash (2021, p. 8) suggest, "education is understood as an 'end in itself' that emerges from the threefold awareness of knowledge as situated, of self as emergent and of collective life as always in development". In this approach, education is situated as a "profoundly non-instrumental practice that is, itself, understood as a form of care for the future" (Facer & Sriprakash, p. 8).

Speculative Fabulations: Young People and Education in/for Socially Just and Sustainable Presents and Futures

In this research, I have sought to identify and analyse some of the power/knowledge/subject relations, and the silences, absences, and subjugated knowledges which structure dominant discourses of young people, twenty-first century skills and uncertain futures. As I signal in

this Coda, fields such as posthumanism, and feminist studies of techno-science open possibilities for re-imagining these relations and ways of knowing, governing and educating young people in relation to uncertain futures. I am not interested in undoing all of this genealogical work by producing another set of "solutions" in this final section. Such a move would be counter to an ethos that seeks to do critical and effective histories of our presents. Some speculative work however, might suggest some different ways for thinking about the relations, theories, approaches and knowledges which structure the discourses, declarations, organisations and networks which comprise the apparatus discussed throughout thesis. In this final section of the Coda, I will make some final remarks in relation to the following aim:

> Fourth Aim: To identify and explore different relations of power/knowledge/subjects that can contribute to discourses of educating young people for more socially just and sustainable presents and futures.

In responding to this final research aim I am going to do two things. First, I engage with the work of Rosi Braidotti and Donna Haraway, and consider what discourses such as "affirmative politics", "entanglement" and "speculative fabulation" (SF) can offer for rethinking the dominant relations of power/knowledge/subjects which structure Australia's neo-liberal education apparatus. Finally, I revisit the young people's stories that have been made present as critically important Interludes throughout this thesis. I revisit the aims outlined in the Prelude to the thesis, my intentions and purposes for including these stories, and the provocations and questions that I had set out in order to frame them. In this context I argue that the Interludes, and the provocations that I have made in relation to them, provide a starting point for considering more socially just and sustainable ways of knowing young people, education, pasts, presents and futures.

Haraway (2016, p. 230) suggests that "speculative fabulations" can provide a "mode of attention, a theory of history, and a practice of worlding". Haraway (2016, pp. 2–3) writes

that “SF” is an “ubiquitous figure” in her most recent work, and which stands in for a number of entangled meanings including doing and writing “science fiction, speculative fabulation, string figures, speculative feminism, science fact, so far”. Haraway (2016, p. 3) emphasises that each of these SFs “need each other”, and together they involve following:

> the threads where they lead in order to track them and find their tangles and patterns crucial for staying with the trouble in real and particular places and times. In that sense, SF is a method of tracing, of following a thread in the dark, in a dangerous true tale of adventure, where who lives and who dies and how might become clearer for the cultivating of multispecies justice.

The “string figure” dimension of SF, for example, signals a “passing on and receiving, making and unmaking, picking up threads and dropping them. SF is practice and process; it is becoming-with each other in surprising relays” (Haraway 2016, p. 3). As a mode of attention and a practice of worlding, concerned with the complex entanglements of human and non-human life, technologies, discourses, material and discursive elements, SF is a productive technology to think with in this context. Sarah Truman (2019, p. 31) notes how SFs (adding “speculative philosophy” to her list) are most importantly “rooted in everyday storytelling practices” which function as a way of defamiliarising and disrupting “habitual ways of knowing”. Truman (2019, p. 31) observes the “Whiteness of mainstream speculative fiction” and argues “that speculative fabulation must be accountable to situated feminisms in how we read, write, and conduct research”. Truman (2019, p. 40) argues that “speculative thought and storytelling are crucial ethico-political practices for undoing regimes of power”. Truman (2019, p. 40) cites Indigenous author and theorist Leanne Simpson (2011) who describes how “Storytelling becomes a space where we can escape the gaze of the cage of Empire […] [and] is an important process for visioning, imagining, and critiquing the social space around us, and ultimately challenging the colonial norms fraught in our daily lives”.

While this research began with a genealogical question and an engagement with Foucauldian genealogies and tools, this work has emerged and become entangled with a complex web of relationships and connections between multiple and diverse material and discursive elements (Haraway, 2016, p. 34). These elements have led me to identify silences, absences and subjugated knowledges in dominant discourses, and to notice that we need "tools for imagining future-presents that are radically different than the world we inhabit now" (Truman, 2019, p. 32). For example, there are many different ways of knowing the future of work, the planet and the relations between them, than the dominant neo-liberal discourses produced by the WEF and UNESCO during the most part of the first two decades of the twenty-first century. Haraway's (2016) understanding of "entanglement" and "speculative fabulation" outlined here, are productive tools with which to consider *What next?* for young people, education and futures, and for engaging in radical thought experiments which can challenge the dominant discourses and logics discussed in this thesis. First, it might be productive to re-imagine the "scale" at which the future is imagined through the relations which structure contemporary understandings of young people, education and futures. What are the different "temporal" scales that could enable thinking about pasts, presents and futures, and the relationships between places, eco-systems, earth systems, the bio-sphere, and the planet? How many generations? Which time horizons? 2050? 2100 years? 1000 years? Haraway (2016, pp. 6–7) describes a "9 billion increase of human beings over 150 years, to a level of 11 billion by 2100". This knowledge requires a radical consideration of the time horizons and technologies that we think with.

It might also be productive to think speculatively about the "spatial" scales informing the relationships between human bodies, non-human beings, places, eco-systems, earth systems, the bio-sphere, and the planet. What alternative ways of doing education policy and practice can account for the ways in which things make sense at different local, regional, state,

national, and planetary levels, and that do not reduce to universal abstractions of individualised skills solutions, and technocentric, uncertain futures? What role can algorithmic technologies play in producing new and more complex democratic processes at these different levels? How can young people, their education and skills be reimagined in ways which account for the depths and scales of the materiality of the human body in their socio-ecologies, beyond the notion of a singular, autonomous organism?

Haraway (2016, p. 35) provides some suggestions, in her discussion of the contested concept of the "Anthropocene", which denotes the period in which the impacts of human activity have fundamentally transformed the Earth's geological, ecological and atmospheric systems. The Anthropocene might provide a productive starting for reimagining the trouble of the present and the future, and for reimagining the ways of being and becoming that flow from/with the kinds of presents and futures that are produced. In her paper "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin" Haraway (2015, p.159) suggests:

> I think the issues about naming relevant to the Anthropocene, Plantationocene, or Capitalocene have to do with scale, rate/speed, synchronicity, and complexity. The constant question when considering systemic phenomena has to be, when do changes in degree become changes in kind, and what are the effects of bioculturally, biotechnically, biopolitically, historically situated people (not Man) relative to, and combined with, the effects of other species assemblages and other biotic/abiotic forces?

And, Haraway (2015, p. 160) describes what it is she thinks we should do with the Anthropocene:

> I along with others think the Anthropocene is more a boundary event than an epoch, like the K-Pg boundary between the Cretaceous and the Paleogene. The Anthropocene marks severe discontinuities; what comes after will not be like what came before. I think our job is to make the Anthropocene as short/thin as possible and to cultivate with each other in every way imaginable epochs to come that can replenish refuge.
>
> Right now, the earth is full of refugees, human and not, without refuge.

The project of making the Anthropocene "as short/thin as possible" and to "replenish refuge" for human and nonhuman beings alike can be taken seriously in rethinking ways of knowing and governing young people, education and futures. Haraway observes the possibilities that the discourse of the Anthropocene can provide for reimagining the crisis of the present and the future. In this sense, the Anthropocene signifies the "unsustainable" trajectories of human systems based on market-driven logics of increased profit, and the production of individualising solutions to problems of uncertainty, but it also signifies the possibilities of a post-anthropocentric approach. In different, although related ways, Rosi Braidotti's (2013, p. 192) "affirmative politics" and "posthuman ethics" echoes the sense in which creating "sustainable transformations" require an understanding of the present and the future in terms such as "posthuman convergence" (Braidotti, 2019, p. 117):

> in the context of the posthuman convergence, it is becoming painfully clear that the dispossessed and oppressed sections of the world population are missing out on the benefits of the Fourth Industrial Revolution, while they are the most severely hit by the climate change and the Sixth Extinction.

Braidotti (2019, p. 132) argues that this convergence requires "transversal ensembles" of "indigenous knowledge systems", "feminists, queers, otherwise enabled, non-humans or technologically mediated existences", as the "real-life subjects whose knowledge never made it into any of the official cartographies or genealogies" (2019, p. 118). Braidotti (2019, p. 118) argues that we can resist "macropolitical structures and hierarchical relations of power" "as a force of creative replenishment for thought and action". To do this, Braidotti (2019, p. 118) suggests that we need to do a number of things, including: i) develop "a cartography of the condition that we are in"; ii) develop "adequate schemes of knowledge about these conditions", and; iii) define "a platform of action on multiple scales in the real world". In many respects this genealogy does the sort of work that Braidotti calls for in points i) and ii). While a more developed exploration of Braidotti and Haraway's work and post-human

ontologies is beyond the scope or purposes of this genealogical research, I want to suggest, in relation to point iii), that they present a range of productive possibilities for rethinking the kinds of relations of power/knowledge/subjects which give shape to discourses of young people in/for their presents and futures.

Building on this discussion, and concluding this Coda, I revisit the young people's stories discussed throughout this thesis. I have included the stories of six young people. Rosie, Chloe, Michael, Ruth, Ash and Astrid's stories provided a series of Interludes which, I intended, would speak to some of the silences and subjugated knowledges identified in this project. Their stories have enabled me to engage with and explore some of the entanglements that appear to shape young people's skills and dispositions, capacities, orientations to, and sense of their presents and futures, education, training and work. These have included discussions about the consequences of precarious work, the climate crisis, the relations between education, training and work, young people's neurodiversities, gender diversities, communities, hopes, anxieties, fears and despair. These young people, and their stories, have enabled me to think more expansively about how human lives are already influenced by, and interact with, a range of human and non-human others in multispecies networks of technologies, rationalities, discourses, crisis, music, animals, workplaces, schools, resources, food, bodies, diseases, local governments, activism, plants, signs, symbols and more. Their stories also illustrate the complexity and messiness of young people's hopes, aspirations, despair, fears and anxieties about their presents and futures as they enact neoliberal subject positions in the places where they live.

Drawing on the work of Phillip Vannini (2015), Julia Coffey (2022, pp. 71–72) argues that "the research encounter is a process, rather than an objective, knowledge-and-truth-producing exercise" in which "analysis becomes a process of 'plugging in' and 'becoming undone' as

we as researchers engage with the data". My own "embodied responses" and "affective intensities" have been a key part of this research assemblage since it began, including in relation to: identifying a sense of discomfort and a problem worthy of analysis; in shaping an approach to new projects in the context of the COVID-19 pandemic; and through ongoing engagement with the young people who participated in interviews since 2020 (Coffey, 2022, p. 71). These stories have provided a "jumping-off point" for exploring "complex social processes related to embodiment", "events, relations, doings, affective resonances, and backgrounds of phenomena" (Coffey, 2022, pp. 71–72), and have opened possibilities to "enliven rather than report" and "to generate possibilities of encounter rather than construct representative ideal types" (Vannini, 2015, p. 15).

While the kinds of evidence-based global policies, reports, and programs discussed in this thesis can be appropriate genres and forms of knowledge production, they do displace, and marginalise the idea of story-telling (and embodied, place-based and affective dimensions) in favour of an abstract truthfulness (Law, 2000). Rosie, Chloe, Michael, Ruth, Ash and Astrid's stories, speak to the wider aims of the genealogical project of making "disorderly and tattered genealogies" with the aim to "reactivate local knowledges" (Foucault, 1997b, p. 10). Their stories and "entanglements" provide a "mode of attention" and "a practice of worlding" that is frequently omitted from the relations of power/knowledge/subjects which structure Australia's neo-liberal education apparatus (Haraway, 2016, p. 230).

It is in this sense that any question of *What next?* must entail a radical and affirmative reimagining of ways of working alongside young people, and the multispecies networks they are entangled with, in different places, to tell and amplify, listen and respond to their stories at times of profound planetary crises. Such approaches to education, training, skills, pasts,

presents and futures in/for the Anthropocene must concern themselves with the ethic and practice of "staying with the trouble". As Donna Haraway (2016, p. 1) suggests:

> Staying with the trouble requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings.

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