Monica Green · Susan Plowright ·
Nicola F. Johnson *Editors*

Educational Researchers and the Regional University

Agents of Regional-Global Transformations

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Foreword: Educational Research that Leads Us to the 'Precipice' of Place

> The quality of human–world relationships must first acknowledge that places themselves have something to say (Grunewald, 2013, p. 624).
> But just as in ecological systems, these margins, or these edge communities, are often places of great diversity and abundance. As such, they are places of hope. They are places that remind us of what is possible and that offer us accounts of collective action that can help us create our own edges, our own vital connection to place. These are the places that can open us, that can lead us to the precipice of our own shared lives (Greenwood, 2015, pp. x–xiii).

This is a book about place-based educational research and a committed group of researchers who with and through their place have something to say. The chapters offer readers various insights into the ways this group of researchers, collectively known as Federation University Gippsland Education (FUGuE), engage with, contribute to and learn, from and about their place. In many ways, this book serves two purposes. First, it illuminates regional places as abundant with diverse perspectives. Second, it offers the researchers themselves a way to better understand their own 'human-world relationships' (Grunewald, 2013) in order to 'improve the wellbeing of human and more-than-human communities' (Greenwood, 2015, xii). Most chapters have at their heart a social justice inquiry into the ways in which education and educational research interact (or not) with a regional place. For the FUGuE researchers, this means paying attention to matters such as distance and terrain, location, particularities of place and 'locational relativity' (Green & Letts, 2007), offering others engaged in educational research and scholarship, a fresh and hopeful way to conceptualise research as relevant and responsive to regional–global matters.

The authors are all proudly educational researchers whose scholarship has located them as integral to the region of Gippsland's wider community. The book project and the research stories are a way to help further define the importance of

'adding the rural' (White & Corbett, 2014) or in this case, 'regional' to research. It also examines the important role a regional university can play to the overall social, cultural, economic and environmental well-being of a place. In this way, the book is distinctive and generative. The researchers have clearly engaged in a critique of their own roles and positions and their desires to be agents for change in place. The book contributes to a growing socio-spatial awareness in relation to educational research, effectively using terms such as space, place, boundaries, edges, crossing, borders, mapping and positionality. These words reflect research that is inherently 'spatial' in nature (Massey, 2005), which guards against seeing *any* place as homogenous or necessarily harmonious.

While not a member of the FUGuE research collective, I too write from the position of knowing and being shaped by *this* place, Gippsland, after spending 3 years working as the Associate Dean and Head of School of Education at the same campus from which FUGuE writes. It has been interesting to read the chapters as now both an insider and outsider and to consider the impact of my own experiences. To me, Gippsland was a place of stark extremes. My most vivid memory when driving into the university campus is of the rich green, lush pastures contrasted with the brown, metal sculptures of the Hazelwood coal mine. Water is also a clear memory for me. I recall the extreme weather patterns as a source of much discussion—it seemed to rain a lot! Historically, the land and water reserves have sustained the rich Indigenous culture of the five Gunaikurnai clans for tens of thousands of years, and subsequent socio-economic endeavours ranging from agriculture, coal mining and tourism. As a local place though, Gippsland has also been buffeted by global winds and socio-economic forces, to which the researchers eloquently respond.

The challenges and opportunities in *this* place are clearly foregrounded across the chapters. The more-than-human world landmarks (Greenwood, 2015) such as the mountains, rivers, 'frog bogs' and beaches are inherently framed as part of the researchers' own stories and how they shaped the research designs. The act of reading reminds me of how our own subjectivities shape and define our research endeavours and trajectories. It is quite unique to have a research text that exclusively offers insights into place conscious methodologies from those *within* place. It is a text that highlights the importance of projecting awareness outward towards places (Gruenewald, 2003) beyond the immediate and the local, with a clear and articulated sense of the relationship of the regional to the global, and of the social lifeworld to the natural environment (White & Reid, 2008).

The chapters in this book ultimately bring alive the complex and interwoven layers of regionality, place, space and 'encompassing' (Plowright, 2016) notions of community, all the while providing insights into how educational research and education researchers can respond agentially within and *for* their regional–global

place. This text is one of deep histories, geographies and stories, and is in essence a hopeful response that offers multiple ways for research and researchers to transform their shared lives and places.

Kelvin Grove, QLD, Australia
July 2018

Prof. Simone White
Queensland University of Technology

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Preface: Idylls, Smoke Plumes and Educational Research from the South-Eastern Tip of Mainland Australia

Around our staff meeting table, we sit at our laptops in companionate proximity amongst strewn papers, writing paraphernalia, teacups and carrot cake. This place, at the very edge of one wing of our regional university campus, reaches into the surrounding bushland, home to kangaroos, wallabies and echidnas who have all been known to visit. As has been our *modus operandi*, we come together as an editorial group, distracted from time to time by the birdlife and beautiful rosy gold light of late afternoon on view through the large picture window. Framing this idyll of tamed bush edging manicured and sculptured grounds and an obligatory lake—typical of a university estate—are the rising plumes of smoke steam that soar high, almost majestically, from Loy Yang power station to the east, and from Yallourn power station to the north. The smokestacks of Hazelwood power station, literally a stone's throw away, were permanently turned off during the writing of this book—an event of local and global note and significance, and a signifier of the maelstrom that is our region of Gippsland at the south-eastern tip of mainland Australia. In this place, capitalist, colonial and anthropogenic forces collide with ancient heritage, biomes and a sustainable just future. Like the smoke plumes, these global tensions loom over us but serve as the impetus to disruptively transform our patch of the globe into a beacon of what is sustainably and respectfully possible.

We see Gippsland as a 'multiverse', which this book mirrors as a multiverse narrative of the diverse educational research projects through which we enact our transformative intentions. As editors, we represent the 14 authors who form FUGuE—Federation University Gippsland Education researchers, a collective of scholars in the School of Education at the Gippsland campus of this regional university. This book is the collective's second venture and expands on our conference paper which was our revelatory and 'constitutive act' that surfaced the convergences of our disparate research. The conference paper touched briefly on our individual projects and so we came to see it as precursor to an edited collection that could juxtapose our research endeavours to disclose the significant reach and depth of our agency in the region, previously unknown to others and ourselves.

As editors, we steered this project for the collective through many convivial, dialogical, funny, food filled and generative gatherings. Those conversations are constituted in the following chapters, each with its own internal integrity as a research or scholarly reflective project, but collectively speaking to our shared themes of promoting regional standpoints, reciprocity and relationality through research partnerships and disruptive transformations. We hope teachers, educators, Gippslanders all, scholars and research students, and people of hinterland regions around the world, find inspiration from what follows in the same way as we have all been inspired by our collective will to transform.

Churchill, VIC, Australia

Susan Plowright
Monica Green
Nicola F. Johnson
Editors on behalf of the FUGuE collective

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Editors and Contributors

About the Editors

Dr. Monica Green is a Senior Lecturer in the School of Education, Federation University Australia (Gippsland). Her teaching and research interests include community- and place-based sustainability pedagogies in primary schools and university–school partnerships. She has conducted extensive empirical research that investigates sustainability curriculum and practice.

Dr. Susan Plowright now lives at the foot of the rolling hills of South Gippsland and is currently exploring a synthesising of her research interests in educational philosophy with rural education in two small rural schools. She works as a Sessional Lecturer in the School of Education, Federation University Australia (Gippsland) in primary and secondary undergraduate and post-graduate programmes.

Dr. Nicola F. Johnson is an Associate Professor in the School of Education, Edith Cowan University. Up until October 2018, she had lived in Gippsland for 8 years. She supervises a number of higher degree by research students in their examination of their own practice within regional locations and has transformed from 'just' focusing on the use of technologies within society and education to including issues surrounding regionality.

Contributors

Mrs. Gabrielle Boyd and Mrs. Sophie Callcot co-teach a grade 4/5/6 class at a small rural South Gippsland school. Mrs. Boyd is also the teaching principal and a key member of the Birth–Year 6 oral language partnership group.

Dr. Michael Dyson is an adjunct academic and former Deputy Head of the School of Education at Federation University Australia. His research interests include innovation in teacher education and alternative education in regional Victoria.

Dr. Sue Emmett has been involved in early childhood education and research for over 30 years. She is a Senior Lecturer in Early Childhood Education at Federation University and manages external partnerships in both rural Australian and international contexts.

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Dr. Cheryl Glowrey lectures in the School of Education, Federation University (Gippsland). She has a long history in secondary and community education in Gippsland, notably in rural schools where challenges of provision, equity and geography influence partnerships and student achievements.

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Mr. Nicholas Johnson is a Gunaikurnai/Monaro Ngarigo/Wurundjeri man and is an Aboriginal Education Liaison Officer in the Aboriginal Education Centre at Federation University, for both Churchill and Berwick campuses.

Dr. Hongming Ma is a Lecturer in the School of Education at Federation University Australia (Gippsland). Her recent research work explores the impact and implications of conducting Science education through university–school partnerships.

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Associate Professor Margaret Plunkett was the Associate Dean Learning and Teaching in the Faculty of Education and Arts at Federation University Australia (Gippsland) for 4 years. She lectures in gifted education and a number of professional experience courses. Her main research interests include professional learning for teachers, gifted education and rural education.

Chapter 1
Agents of Regional–Global Transformation: Federation University Gippsland Education (FUGuE) Researchers

Susan Plowright, Monica Green and Nicola F. Johnson

Abstract The lived particulars of Gippsland, the region, the land, the people and all life, are the heart and impetus of Federation University Gippsland Education (FUGuE) researchers, the chapter and collection authors. To us, Gippsland is portentous as both a wonderful place and prophetic of the transformations required for a sustainable and just regional–global future. The Latrobe Valley, for example, home of our small, new, regional university campus, is both bucolic rural locale and site of several coal-fired power stations. For many years, non-Indigenous residents enjoyed a fairly self-contained place of financial and intergenerational security. However, decades of seismic shifts have written new layers of trauma onto the Gippsland palimpsest that began with European invasions. With global imperatives to transition to a low-carbon economy, Gippsland is a canary in the global coal mine. Assertively locating our research in this region, we address moral and institutional imperatives to act as agents in generating a new regional–global *modus vivendi* from hinterland and a range of other minority positionalities. To set the regional scene, we map territorial and ideational incongruences that the toponyms of 'Gippsland' and 'region' conjure. We narrate how FUGuE contrapuntally emerged from this context and argue that through 'word and deed', FUGuE challenges hegemonic positivist and dominant discourses of what counts as notable research. Like a Bach fugue masterpiece in which each voice has intrinsic integrity but in counterpoint transforms into something new, our interwoven research voices of transformative agency through educational research, disruptively reveal our appreciable, but largely underappreciated, 'impact'.

Keywords Educational research · Regional university · Transformation · Sustainable and just future · Engagement and impact

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Regional Educational Researchers: Place, Positionality and Regional–Global Imperatives

The 'regional', 'rural' and 'remote' areas of Australia are vast, with widely separated human congregations and habitations. To many residents, this space and distance is identity-defining, attractive and affords close connection with, or enplantment in, the natural world. To many, these places are incomparable. The authors of this chapter and edited collection hold these places as intrinsically worthy and are ourselves integral constituents of Gippsland, the easternmost region of Victoria, Australia. Through the lens of educational research, it is the particularities and futures of Gippsland, the region, the land, the people and all life, that are the heart and impetus of the authors. Place in this regard is a central facet that weaves its way throughout the fabric of the book. From our viewpoint, we understand place as a specific locale, in a particular physical location that pays homage to the relationships between people and the places in which they dwell. Such relational exchanges are not unique to the Gippsland region of course, but are a broader reflection of how all of us are connected globally in some way to the places where we exist. As David Gruenewald argues, 'Place … foregrounds a narrative of local and regional politics that is attuned to the particularities of where people actually live, and that is connected to global development trends that impact local places' (2003, p. 3). He goes on to suggest that place is profoundly pedagogical, teaching us about how the world works, and how our lives fit into the spaces we occupy. It is these particular places with their particular attributes, he suggests, that shape identity and possibility. Although his insights into place ring true for us as Gippsland-based researchers, we believe such an understanding also speaks to the broader ways in which all of us are shaped by where we live and work. Taking this idea to its broadest conclusion, the book not only represents Gippsland as a wider case study that frames our educational research but also affords us the important opportunity to translate and connect local knowledge and issues beyond our region.

As a boundaried or territorial 'region', Gippsland covers an area of approximately 41,556 km^2, some 18% of Victoria's land mass. The region is well known for its primary production through mining, power generation, forestry and farming and begins 85 km to the east of the capital city of Melbourne, extending to the furthest eastern tip of the state. It extends north–south from the Great Dividing Range to the shores of Bass Strait, which divides mainland Australia from Tasmania, and largely, but not entirely, corresponds with the five tribal lands of the Gunaikurnai peoples. In 'official' terms, six local government areas (LGAs) constitute Gippsland (see Figs. 1.1, 1.2, 1.3).

Federation University Gippsland Education (FUGuE) researchers, authors of this edited collection, argue Gippsland is portentous in two senses. It is simultaneously a 'wonderful' place of great beauty and other liveability features, as well as 'prophetic' of the transformations required for a sustainable and just future, regionally and globally. For example, the Latrobe City LGA is the geographic home of FUGuE's university campus and territorially at the heart of Gippsland. It might be described

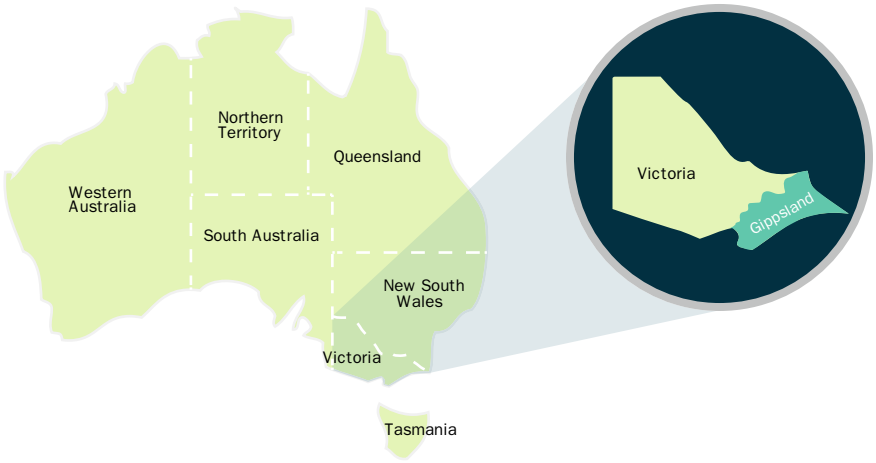

Fig. 1.1 Australia, showing the state of Victoria and Gippsland

Fig. 1.2 Gunaikurnai clan map. http://www.batalukculturaltrail.com.au/ Permission granted from Krowathunkooloong Keeping Place

as 'bucolic' but up until recently, it also produced up to 85% of Victoria's electricity. Thus, cleared pastoral agricultural land is dotted with coal-fired power stations drawing on deep brown and black coal deposits laid down over hundreds and thousands of years. With other heavy industry such as a paper mill, some of these buildings and sites would be at home in Dickensian England but they meant for many years, for non-Indigenous residents, the Latrobe Valley[1] was a fairly self-contained place of job, financial and intergenerational security. It was respected as Victoria's powerhouse. However, decades of seismic political and economic shifts have written new layers of instability and trauma onto the Gippsland palimpsest that began with European invasions of what were Gunaikurnai lands. More recently, the Latrobe

[1]Latrobe City is the local government area. Latrobe Valley is the vernacular term most commonly used to refer to the same area.

Fig. 1.3 Topographic intersections of FUGuE research projects

Valley has been rocked by privatisation of large industries, a devastating mine fire and the recent closure of Hazelwood Power Station and brown coal mine. With the imperative for a transition to a low-carbon global economy, this place is a social, cultural, environmental and economic canary in the global coal mine, where hope and vision, transition and transformation must be humanly possible.

FUGuE researchers assertively locate ourselves in our regional context to provide a close-grained focus at cultural, environmental and other levels that promise sustainability of these communities (Green, 2015). We act as agents for hope and transformation for a sustainable and just future, taking what we see as paths 'less travelled' (Plowright et al., 2016). For example, in Chap. 10, Hongming and Monica reveal the complexities and ambiguities of Gippsland by moving from lecture-based science teacher and sustainability education classes to a wetland created by Hazelwood (coal-fired) Power Station as compensation to the local community. As the world painfully transitions from fossil fuel energy to a zero-carbon economy, they work literally and figuratively, on the ground and at the coalface. As such, as mostly women, we assert and extend the feminist truism that the 'personal is political' to argue our Gippsland-placed research is not only political but existential (Plowright, 2013). Equally, by publishing together as FUGuE, we can more visibly 'insert' our research 'word and deed' (Arendt, 1958, p. 176) into the world as a political act, giving our regional efforts, struggles and contributions to an urgently required global consciousnesses more visibility, because we research from a satellite campus within a small, new and regional university, while on the global stage we are 'southern-tier' academics (Connell, Pearse, & Collyer, 2018) among other minority positionalities. Importantly though, we do so while seeking out and advocating for Gippsland voices

similarly rendered less, or invisible in contemporary hegemonies. We are thus 'going against the grain' (Plowright et al., 2016), to deliberately recognise and reinvest in ourselves, Gippsland and regional lifeworlds in general, as validation that we are anything but marginal, hinterland and second-tier.

As well as existential though, we share a statutory responsibility for regional –global relevance. Federation University establishing legislation in Victorian Parliament requires the university, and therefore us, to have a 'regional focus, national scope, and international reach' (Federation University, 2015, p. 2). However, our university is Australia's newest, commencing in 2014 as an amalgamation of existing regional campuses, including the Gippsland campus that is our institutional home, previously part of Monash University a much larger and internationally renowned research-intensive university. Thus simultaneously, the new Federation University corporation, educational researchers at the Gippsland campus and Gippslanders are all grappling with the necessity of repositioning, transitioning and transforming.

This chapter thus sets out in some depth some of these geographic, temporal, institutional and ideational contexts from which FUGuE emerged and within which we are determined to work in a transformative spirit. An exploration of Gippsland and the contested territories, toponyms and conceptions of regionality, that as locals we daily navigate, forms the first section. We then explain our text-as-fugue compilation and assert that in fugue and FUGuE form, not only do our individual educational research projects—worthy in their own right—become more visible, but that our significant networked and engaged presence across the region is revealed (see Fig. 1.3) through juxtaposing a sample of our work in this edition. Through this collective presence, we illustrate an appreciable impact with, in and for Gippsland(ers) of relevance to regional researchers and dwellers in many parts of the world. We acknowledge Gunaikurnai on whose land we engage in research and recognise that although we have now initiated a relationship with Gunaikurnai (see Chap. 7), our perspectives are almost exclusively 'white'. With that important caution, we argue in the concluding coda that our research in collection is worthy of recognition and valorisation in conceptions of what counts as meritorious research and that official codifications need to expand to take account of a collective engagement and impact such as ours.

Gippsland as Region: Territorialities and Toponymical Caveats

Gippsland is not a regional totality (Painter, 2008). 'Gippsland', like many 'regions' (Painter, 2008), is an overarching nomenclature encompassing multiple, distinct locales, each with their own features of topography, geography, demography, politics, economy, climate, industry and accessibility. Mapping each of these across Gippsland would show 'incongruous' or 'noncongruous' boundaries (Painter, 2008, p. 352) several of which we explore here. To begin, what is 'regional' is itself a highly contested conceptualization (Painter, 2008). Looking in on Australia from a

northern hemisphere vantage point, Painter argues that regional Australia 'refers to areas of the country away from the major urban centres but excludes the very sparsely populated nonagricultural areas known as "remote Australia"' (2008, p. 355). In her work, reported on in this volume, Margaret draws on the congruent-with-Painter, but more precise, Remoteness Structure of the Australian Statistical Geography Standard (ASGS). This standard categorises areas of Australia through five Remoteness Area (RA) categories including Major Cities, Inner Regional, Outer Regional, Remote and Very Remote (ABS, 2018a). The classifications are based on the physical road distance to the nearest urban centre. Using this classification, the western portion of Gippsland is inner regional, the middle section is outer regional and the far eastern section is remote. Officially and politically though, there are six LGAs governed by locally elected councils (see Fig. 3).

The totality of Gippsland as an official region though is not necessarily known to or felt by all Gippslanders, as Cheryl and Susan, both residents and researchers from South Gippsland, know. Many children and parents in their village don't know where Churchill is, the location of Federation University campus and their workplace. As a place an hour's car drive away and 'over the hill', it certainly isn't considered as part of their region. Very much part of their region though is Corner Inlet, one of the ecological marvels of Gippsland (Glowrey, 2018). Along with Gippsland Lakes further east, these two wetland areas are designated as of international importance under the Ramsar Convention, a global intergovernmental treaty. Corner Inlet's waters are a safe haven for birds that know no political borders, flying to and from Siberia every year, and the base of a natural amphitheatre. This enclosing locale within south Gippsland is their region of the world.

Corner Inlet waters are shallow and protected from the southern elements by Wilsons Promontory, an official bioregion (DELWP, 2017), tethered to the mainland through a slender isthmus. 'The Prom' is a 'spectacular area of rocky hills and mountains, dense heathy lowlands, sweeping white sandy beaches and prominent granite headlands surrounded by the cold waters of Bass Strait' (DELWP, 2017, 'Wilson's Promontory Bioregion'). Other designated bioregions include the Gippsland Plains and the East Gippsland Lowlands, while elevated bioregions include the East Gippsland Uplands, Strzelecki Ranges, Highlands–Far East and the Southern Fall (of the Great Dividing Range). The latter are 'dissected uplands' with 'moderate to steep slopes, high plateaus and alluvial flats along the main valleys' (DELWP, 2017, 'Highlands-Southern Fall'). Bioregions are natural territorialities with which other territories (political, cultural) may or may not coincide so that in complex formation, their congruences, incongruences, internal particularities and external contexts shape the lifeworld of Gippslanders. For example, Gippsland's significant forests are highly contested sites seen by some as resource assets and by others as important biodiversity and carbon dioxide sinks that need preservation, because with one other area, the forests of Gippsland form 'the largest blocks of land that make the highest relative contribution to forest biodiversity conservation' (VEAC, 2017, p. 16) in Victoria.

The demographic territorialities of Gippsland include a population of approximately 310,361 across the electoral divisions of McMillan and Gippsland (ABS,

2018b), which cover the six LGAs. The population is clustered mostly in regional urban centres and surrounding towns with a smaller proportion of dispersed farms and in small villages. The population in the town centres of Moe, Morwell and Sale include people who are among the 10% most disadvantaged in Australia (Australian Government, 2013). According to the 2016 census, Gippsland's population includes significant groups of New Zealand, Indian and European migrants, predominantly English, and Aboriginal and/or Torres Strait Islanders constitute up to 1.5% of the population (ABS, 2018b). This settlement pattern displaced the Gunaikurnai people, the traditional owners of most of what we now call Gippsland. One telling of the Gunaikurnai dreaming story says that:

> … the first Gunaikurnai came down from the mountains in Victoria's northwest carrying his canoe on his head. He was Borun, the pelican. He crossed over the river at what is now Sale and walked on alone to Tarra Warackel (Port Albert) in the west. As he walked, he heard a constant tapping sound but could not identify it. When he reached the deep water of the inlets, Borun put down his canoe and, much to his surprise, there was a woman in it. She was Tuk, the musk duck. He was very happy to see her, and she became his wife and the mother of the Gunaikurnai people—they are the parents of the five Gunaikurnai clans (Gunaikurnai Land and Waters Aboriginal Corporation, 2017).

The five clans of Brabralung, Bratualung, Brayakaulung, Krauatungalung and Tatungalung (see Fig. 1.3) each had a place of which they were custodians and had their place in a shared a governance system across Australia that facilitated negotiated coexistence for tens of thousands of years, until white 'civilization' arrived. Since then Gippsland has been a colonial palimpsest of erasing and writing over (see Tope, 2014) Gunaikurnai existence via imposition of western agriculture, industry, infrastructure, settlements and governance patterns, in addition to massacres and the introduction of decimating new diseases.

Thus, to many, Gippsland is not Gipps' land at all. From a position of power, a white man 'found' and named the place after his sponsor who had never set foot on the land. This explorer did not though find *terra nullius*, despite British legal proclamations. It was land inhabited by peoples of complex cultures, political systems and systematic, sustainable agricultural practices (Pascoe, 2014). The Gunaikurnai peoples were one of the earliest First Australians to be displaced, massacred and culturally eviscerated, and the wounds are raw still. For Aboriginal Australians, place and human are integral, symbiotically coexisting for 65,000 or more years. For Aboriginal Australians, place **is** existence. Each place has its human custodians with a specific language to represent it. Maps of Aboriginal Australia show the land blanketed by languages and dialect groups so that no place is left untended or unspoken of. Pascoe (2008, np) writes:

> We know that there were over 250 language boundaries in Australia and we know that they have existed within those lands for many thousands of years because the vocabulary of particular languages is distinguished by reference to geological and climatic events peculiar to their area.

Indeed, it is reported that Gammage, in a groundbreaking thesis that Australia in its entirety was the biggest estate on Earth, proposed that Aboriginal land management was sophisticated, interconnected and even intra-continental (Boyce, 2011).

However, like a palimpsest, a parchment or paper where previous text has been erased and written over sometimes multiple times, traces have survived, and FUGuE researchers are committed to walking with Gunaikurnai peoples as they create and narrate new histories. Nicholas, a proud Gunai, Monero Ngarigo and Gunditjmara man has joined FUGuE through the writing of Chap. 7 which has since spawned new networks and partnership ideas and plans.

In contrast, subsequently applied British and 'western' governance systems have resulted in metropolitan places predominating politically and lexically because of their sheer mass and preponderance of human concerns. In a proportionally representative electoral system, populously dense places have more political representation than sparsely populated ones. As such it follows that 'rural', 'regional', 'remote' and First People's standpoints, as less numerous, are commensurately less represented and less visible in the public realm. Equally, English terms like 'regional', 'rural' and 'remote' toponymically construct these places, in comparison with, and in deficit relation to, that which is metropolitan. For example, a thesaurus tells us those from metropolitan places are 'cosmopolitan', 'urbane', 'modern' and 'sophisticated', whereas 'regional' people are 'parochial', 'vernacular', 'insular' or 'provincial'. The former is represented as worldly and intelligent, the latter in antonymous comparison.

In that vein, toponymically, an area between urban and rural is more likely to be known as peri-urban than peri-rural, while an antonym for 'remote' is *terra incognita*, a place not known. Only from a metropolis, however, are these places out-back (why not out-front?), too far away to be seen and known. These places do not have English language to represent their particularities and are instead homogenised by collective nouns originating in other lands. This leaves the authors of this chapter and collection with a dilemma, because while we seek to speak of our regional particulars and disrupt colonial and other hegemonies, we find ourselves using the very language that form and represent these hegemonies. We see this as unsatisfactory, but for communicative purposes, we are saddled with many of these terms in this chapter and book but convey in the strongest possible terms that we are troubled by them.

Gippsland: Towards a Transformed *Modus Vivendi*

Just as Gippsland is portentous of the need for reconciliation between first peoples and subsequent arrivals, it is a harbinger of the demise of capitalism and the transformations required to curb the rise of global temperatures. Like the snake eating its own tail (Bauman, 2007), capitalism has reached the point where voracious consumption of Earth's material resources is self-harming. Gippsland is experiencing significant social, economic and sustainability challenges, including a changing climate of decreasing rainfall and water shortages, rising sea levels, urban development, high unemployment, declining natural resources and a broader transition to a low-carbon economy. Gippsland's forests, in dramatic decline, have been consumed for agriculture, settlement and export contributing to the release of stored carbon. Coal deposits have been exhumed, consumed and transformed into both electricity and

climate-changing pollution in the quest for liquid capital. However, these hegemonic forces of the 'modern' world are shifting so that, as sociologist Zygmunt Bauman (2007, p. 1) observes, the human condition has passed from a:

> 'solid' to a 'liquid' phase of modernity: that is, into a condition in which social forms (structures that limit individual choices, institutions that guard repetitions of routines, patterns of acceptable behaviours) can no longer (and are not expected) to keep their shape for long, because they decompose and melt faster than the time it takes to cast them, and once they are cast for them to set.

FUGuE recognises that in these 'liquid times', Gippslanders as a microcosm in the global human condition need to negotiate a new *modus vivendi*—an agreed way of living allowing conflicting parties to live in peace—for a more sustainable and just future. Employing ideas from Gadamer, Bauman suggests agreements are built on 'fusions of cognitive horizons', which require mutual understanding borne of shared experience but that sharing experience 'is inconceivable without shared space' (Bauman, 2007, pp. 91–92). Creating shared experiential spaces to achieve fusions of cognitive horizons through educational research is a *raison d'etre* of FUGuE. We determinedly act as agents for achieving a sustainable and just *modus vivendi* for Gippsland and through Gippsland, the globe. In this, we simultaneously respond to the objects of Federation University, the regional university base of our research, which include 'to serve the Victorian, Australian and international communities' (Victorian Legislation and Parliamentary Documents, 2016). The Federation University Strategic Plan (2016–2020) states that it will be 'productive and effective in forming partnerships and engaging with its communities and regions' because it has a responsibility for 'effective stewardship of our environment and resources' (Federation University, 2015). This then is the context from which FUGuE emerged and in which we seek to be agents of regional–global transformation.

FUGuE: Federation University Education Gippsland Researchers

FUGuE is an informal grouping, not a recognised School of Education research group. We emerged in August 2016 in response to the Australian Association of Research in Education (AARE) conference theme *transforming education research*. A casual kitchen conversation between Anna and Susan led to eight of us iteratively producing a shared conference paper through formation of a space of appearance (Arendt, 1958). Formed of human plurality, a space of appearance is predicated on the ancient Greek notion that

> the reality of the world is guaranteed by the presence of others, by its appearing to all; "for what appears to all, this we call Being," and whatever lacks this appearance comes and passes away like a dream, intimately and exclusively our own but without reality (Arendt, 1958, p. 199).

In this light, denial of a space to appear before others is to be deprived of reality.

Being FUGuE is a way to assert our reality, for we are a group of mainly women grappling with the 'coloniality of gender' (Connell, 2014) and see with Connell that 'worldwide making and unmaking of gender relations is a significant part of the most urgent issues of our time' (2014, p. 562). Most of us are mature age and some are also only now finally finding time and space to research. We all belong to the small minority of rural education researchers (Bobis et al., 2013) within the education research field, itself dominated in the hierarchy of research funding receiving only 2% of Category 1 funding across Australia (Cutter-McKenzie & Renouf, 2017). We are of the less recognised global south (Connell, 2007) and are thus southern-tier academics (Connell et al. 2018). We research in and for places beyond large capital conurbations politically less represented and are researchers in a small, new and regional university—a sapling in an old growth forest. It is one of the Regional Universities Network (RUN) that has performed particularly poorly in securing research funding (Cutter-McKenzie & Renouf, 2017, p. 5). We thus inhabit, speak and research from hinterland and peripheral spaces. In this context, our quest for validity and visibility, for recognition as being, is visceral.

As a space of appearance emerges from human plurality, a fugue is a creative musical form emerging from phonic plurality or polyphony. Polyphony, crafted into counterpoint, has long been held as a generative condition:

> Counterpoint can be read as a representation of the intrinsic impetus of the creative process, i.e., the combination and juxtaposition of opposite elements to go beyond established knowledge and enable the generation of new and valuable ideas (Corazza, Agnoli, & Martello, 2014, p. 93).

In fugue musical form, the composition begins with the statement of a melodic subject. Progressively, other voices are woven in, in counterpoint, each simultaneously reworking the subject in their distinct and distinguishable way. The art lies in holding the integrity of each voice while creating rich harmonies from melodic junctures between them all. The sum of these harmonic intersections and interstices creates a new auricular tapestry, selvedged by unison statement of the subject in a coda. FUGuE texts similarly weave our distinct research voices and foci to create (con)textual fugues (Plowright et al., 2016). To do this we employ a mapping as method approach where we gather, forming convivial spaces and share our research through 'vignettes of practice', sometimes spoken sometimes written. Early on, this process revealed three interlocking place-based threads—a determination to be a voice for rural/regional standpoints; relationality and reciprocality as central to our research design; and 'disruptive transformations' as our purposive goal (Plowright et al. 2016). Our very way of working disruptively transforms conventional university hierarchies because despite official positioning as Masters and PhD students, lecturers, senior lecturers, associate professors, tenured or sessional academics, in

FUGuE, we each have equal billing and say at the roundtable. Equally, leadership is shared, shifting, negotiated and legitimated by the group, rather than determined by official status or title.

For this book, we explored notions of transformation, sustainable and just future, and hopes and visions. By revealing and mediating our multiple 'definitional, ideological and purposive orientations' (Fenwick, 2010, p. 89), and using Aristotle's invention topic[2] of definition, we explored the terms etymologically mining the thesaurus to help articulate a shared meaning. For transformation, we looked to the root words of 'trans' and 'form'. Synonyms we selected included to 'go forth' (beyond the university) and 'to make' or 'shape' physical, emotional, psychological, personal and intellectual forms, in order 'to be', or to bring them into being. These meanings represented our shared propensity to form on-site partnerships and projects, some of which are introduced in Part I of this volume. We conceptualised transformation as 'alteration for the better' but recognised this often-included discomfort and disintegration 'before coming out the other side'. We grappled with adaptation to imposed transformation and self-generated transformation noting there were methodological implications for us as researchers and a responsibility to transform our own educative practices as a result of our research, which is the focus of Part II of this volume.

Through exploring 'sustain', as a root of sustainable, the synonyms of 'foundations' and 'tenacious' came to the fore. Through discussion, 'sustainable and just future' came to mean establishing foundations for, and then tenaciously sustaining, shared spaces of appearance and reciprocality across Gippsland in order that Gippsland life; our regional university and Gippsland campus; access to higher education for Gippslanders; rural education research and researchers not only survive but thrive through a new *modus vivendi*. Our hopes and visions for our own contribution thus can be articulated as goal of regional research reinvestment. This commitment positions us in contrast to researchers who might mine the *phronesis* (practical wisdom) of Gippslanders for use outside the region. This is not through a parochial exercise, because it is enacted simultaneously for transformations in regional, global and existential realms. In concert, we make a significant contribution but our impact is not readily visible under the dominant hegemonies of our time, thus through collecting our stories into one compilation, we assert we, and our research, are worthy of recognition.

Educational Researchers and the Regional University: FUGuE as a Case Study

As a collection of chapters, the book weaves multiple FUGuE standpoints that reveal the worth, beauty and challenges of Gippsland/regional life, as well the transformative opportunities borne of relationships between FUGuE researchers and Gippslanders who share a passion for a sustainable and just future. In this chapter,

[2] A topic or topos is a place or way of generating content for persuasive argument.

Susan Plowright, Monica Green and Nicola Johnson raise the curtain, introducing and mapping the complexities of Gippsland's historical, territorial, toponymical and 'regional' contexts, describing how from this context our FUGuE collective emerged and our *modus operandi*. Employing the fugue form, the chapter states the key themes and then weaves together the distinct research voices of FUGuE researchers, concluding with a coda, which argues the impact of our collective work ought to be externally recognised and valorised.

Part I: Regional University Educational Researchers and Transformative Partnerships

Individually and collectively, the chapters in this first part of the book aim to provide a voice for Gippslanders, the Gippsland region and regional lifeworlds in general. As noted earlier, participatory and reciprocal approaches are one of three key themes of FUGuE research practices, which are thus framed and informed by an extended 'we' (Somerville & Green, 2015). Accordingly, our research encompasses multiple stakeholders, including academics, school communities (teachers and children), parents and community members, agencies and industry with whom we establish strong and respectful relations. Our stakeholders also include the distinctive Gippsland built and natural environments that constitute the places where we all live and work. This part juxtaposes a sample of characteristically FUGuE research partnerships that intends the research to be useful in ways the particular community in focus understands (Reid et al., 2010). The research designs are shaped and informed by relationships and efforts to practice care and reciprocity through 'co-production' (Darby, 2017). In such approaches, the *process* of research, as much as the end results, generates benefits for partners, academic and non-academic alike.

In Chap. 2, Cheryl Glowrey and Susan Plowright highlight a community-based participatory action research project between them as FUGuE researchers, neighbours and 'locals' working together for the first time, and educational leaders from two small primary schools, a kindergarten and a playgroup. This partnership co-designed a strategic action plan to support children's (birth-year 6) oral language development in a relatively isolated 'outer regional' area of South Gippsland. Cheryl and Susan explore the intricacies of cultivating new relationships and dealing with the realities of distance, recruitment of rural principals and different sector needs and priorities. They find that the generative potential of such a partnership is nevertheless well worth the effort for the university and the children.

Susan Plowright, who researches ethical capabilities and is a sessional lecturer, focuses in Chap. 3 on one of three oral language strategies for the birth-year 6 partnership described in the previous chapter. Susan joins in reflective conversation with teaching principal Gabbi Boyd and teacher Sophie Callcott, to explore and theorise the factors that allowed a very exploratory idea from Susan's doctoral thesis and a brand-new partnership to thrive. Through children-led decision-making and

curriculum design within the Speaking and Listening and Ethical Capability areas of the Victorian Curriculum, the project generated many new possibilities for the children, educators, Susan and the local community.

In Chap. 4, Nicola Johnson, at the time of writing Deputy Head, School of Education at Federation University, details her empirical research of a pilot project that tackled the issue of primary school students at risk of disengaging from education at a very early stage. Invited by the cluster, and demonstrating the contribution a regional university can have to bridging vast distances and reducing isolation, Nicola examined the social, cultural and educational practices of a cluster of eight primary schools and government agencies and social workers in remote East Gippsland. Together, these agentive educators and service providers demonstrated the initiative to take matters into their own hands as is often required when living so far away from government and governance centres. Nicola details the high level of community commitment towards, and agency for, the well-being, hope and visions of East Gippsland families and children, their place and its future.

In Chap. 5, Anna Fletcher theorises her involvement in a Gippsland professional learning community, critically reflecting on her role as an invited critical friend in a school improvement project in a Latrobe Valley primary school. Throughout the chapter, she grapples with notions of trust, credibility and positionality. In this work, she 'disruptively' expands on Banks' typology of cross-cultural researcher positionality by generating a very useful additional conceptualization of an 'enriched insider'—a position that emerges through the enactment and development of her own agency and that of the school leader in their partnership relationship.

In Chap. 6, Margaret Plunkett and Michael Dyson report on the 'Broadening Horizon' innovative project developed in response to concerns of local industry leaders about the preparedness of Gippsland secondary school students for work experience and ongoing employment. At the time of writing, Margaret—an Associate Dean (Learning and Teaching)—and Michael—an adjunct academic—were invited to evaluate the pilot phase and found that both industry and schools benefitted from collaboration to develop a work-embedded curriculum providing students with real-life skills and role models. Importantly, they found traditional barriers were broken down between schools and local industry and that important links were formed with our campus through the process. Along with all chapters in Part 1, they illustrate the important transformative contribution regional educational researchers can make in situ through what we call 'regional research reinvestment' as noted earlier in this chapter.

Part II: Regional University Educational Researchers and Self-reflexive Transformations

In Part II, the FUGuE themes of partnership, relationality and reciprocality are continued as background contexts, while 'disruptive transformations' take the foreground. The disruptive transformations in focus are those where self-reflexivity take centre

stage as a way of highlighting the performative processes and diverse resources that assist in constructing selves (Watson, 2006) as teacher educators and researchers. The chapters in this part promote the worth of a milieu of education research in a regional university through demonstrating how it can be transformative for the researcher's actions as teacher educators. This reinvests learning in the region through Gippsland-based early childhood, primary and secondary teacher education programmes. It contributes new understandings and knowledge to the field of education beyond the region through global and historical debates and conceptions of the teaching/research nexus on which higher education has been built.

Chapter 7 is the fruit of a brand-new research partnership formed in part by identifying a gap in our collective research foci but in most part through the interests and expertise of Sue Emmett, Cheryl Glowrey and Nicholas Johnson. Sue is an early childhood academic and Cheryl an environmental historian and a secondary teaching academic. They invited Nicholas, a proud Gunai, Monero Ngarigo and Gunditjmara man and Aboriginal Liaison Officer at the Gippsland campus to join with them to critically evaluate future possibilities to transform participation of Gippsland Koorie (Aboriginal) families in early childhood services. While the findings are important in their own right for Gippslanders, the research process itself is a key feature of this chapter. Nick conducted interviews with early childhood directors and leaders all over Gippsland, which has begun to build new relationships and may have inspired Nick to consider a research career! Importantly also, the authors', and FUGuEs', collective understanding, and likelihood, of a potential role for the Gippsland School of Education in working alongside the services and with Nick as a new partner, has emerged.

Chapter 8 illustrates Linda MacGregor's reflexive self-study of her involvement in a school-based partnership project with a central Gippsland school, a philanthropic organisation and pre-service teachers. Linda pays attention to the ways in which the project has transformed her pedagogical approaches for helping pre-service teachers connect theory with practical application. The chapter, Linda's first publication and written while a doctoral candidate, and lecturing and coordinating the Primary programme on campus, provides a detailed description of her learning, her understanding of the critical nature of academic reflection and the impact of the research findings and research process on her personal/professional growth as a teacher educator.

The project described by Monica Green, a place-based researcher and senior lecturer, in Chap. 9 is underpinned by the design of an innovative arts-based methodological framework undertaken with children from sustainability-rich schools in the Latrobe Valley. The chapter tells of the transformative impact of the research on Monica who was struck by the children's unwavering aspirations for planetary sustainability at a time of unprecedented environmental challenges and uncertainty in the places where they live. A key dimension of the research is the authentic sustainability artefacts constructed by children that represent how they come to know and live the world through place-based sustainability learning. The findings as well as the methodologies used with children are applied pedagogically in Monica's university teaching to prepare pre-service teachers to become self-reflexive and equipped to educate for planetary sustainability.

In keeping with themes identified in the previous chapter, in Chap. 10, Hongming Ma, a science education researcher and lecturer, and Monica Green report on a self-study that focused on the challenges and transformation they experienced when moving from traditional lecture-based science teacher education to a partnership and place-based framework. At the heart of the chapter is a science education course designed to assist pre-service teachers to develop their science teaching philosophy and teaching strategies through teaching science to local primary-aged children at a wetland in Latrobe Valley. Highlighting themes of complexity, uncertainty and collegiality, Hongming and Monica engage with the transformative power of reflective research practice and a 'critical friend' approach to deeply understand and improve their own teaching practice.

In Chap. 11, Di Harrison, with Susan Plowright, explores the higher education online domain. The chapter is Di's first publication and with Susan as a co-writer, her chapter illustrates the generative mentoring, scaffolding and coaching milieu that FUGuE purposefully cultivates. Di's chapter emerges from her self-questioning of the effectiveness of her online pedagogical practices for teaching graduate students. After conducting phenomenologically informed in-depth interviews with several former students for her nearly completed Master's thesis, Di reports on her deepened understanding of supportive and responsive online pedagogical practice, which now utilises ideas based on theories of social presence.

The collection is rounded off, in keeping with fugue form, with a brief Postscript which draws the contrapuntal voices of each chapter together in unison to affirm the impact we see our research projects as having on a regional–global scale.

Coda: An Appreciable, but Largely Underappreciated, Collective 'Impact'

Assessment of research 'impact' is a state policy lever designed to limit unconstrained use of public money for purely 'curiosity'-driven self-referential research (Phillips, 2014). Impact measures and metrics are part of the larger quality assurance industry designed largely by higher education outsiders to prize open what they see as the 'black box' of academe and its 'mysterious interior world' (Plowright, 2013, p. 52). These assertions are reflected in the current Australian Research Council (ARC) definition that research impact is 'the contribution that research makes to the economy, society, environment or culture, *beyond* the contribution to academic research' (ARC, 2017, p. 5, emphasis added). These 'striking a blow' (Pain, 2014) conceptualisations reward post-research results such as commercial products, licences and revenue, new companies, job creation, implementation of programmes and policy, citations, and integration into policy (ARC, 2015, 'Research Impact Pathway').

Many of these types of valued outcomes do not capture or 'see' our place-based educational research. In relation to 'citations' as a measure, for example, our position in the 'hinterland', on the periphery, and numerically in the margins of educational

research (Bobis et al., 2013), means the number of other researchers likely to cite our work is inherently smaller than for researchers of other populous and more dominant fields. Equally, for those outcomes that are more applicable to educational research per se, such as 'implementation of programs and policy', the scale of our impact is not valued. Our research often has led to programmes and policy implementation, but usually at more localised sites, whereas what is valued highly by national assessment processes is impact on an overtly national, global or universal scale. This conception though is blind to other conceptions of scale. For example, several FUGuE researchers work with children, principals and teachers of small rural schools of less than 100 students. Each of these schools is tiny or small but as Susan, Gabbi and Sophie in Chap. 3 discuss, schools of this size are numerically significant on a global scale and share many characteristics such as multi-age classes and teaching principals, regardless of contexts of hemisphere, culture and national economy. What happens in them matters for a statistically significant number of children, families and communities around the world, however, individually, these schools are often positioned as lower status. This also positions small rural school research as of low or insignificant status despite its potential value to constituents of these schools around the world.

Our research is also invisibilised by the ARCs definition of engagement in the *EI 2018 Framework,* where it 'is the interaction between researchers and research end-users outside of academia, for the mutually beneficial transfer of knowledge, technologies, methods or resources' (ARC, 2017, p. 5). This ideologically laden definition reflects a positivist linear and market-driven (Darby, 2017) conceptualisation of research, and as such appears to count much of FUGuE research out of what counts. We value genuine two-way relationships with participants often in co-design and co-implementation arrangements (see, for example, Chaps. 2, 3, 5, 7, 9 and 10). Pain (2014, p. 22) characterises the situation as a competitive dichotomy between the 'loud/public/one-way/high-scale/single-blow impact versus quiet/two-way/local/iterative/processual' impact, with the former currently winning out in the reputational stakes. It doesn't really need to be said, but FUGuE sees ourselves as towards the two-way end, but this edited collection signals we want to be anything but quiet about it!

Neoliberal regimes of research assessment, critics argue, have displaced norms such as communism (as in community), universalism, disinterestedness and organised scepticism, with attitudes of professional pragmatism, sponsorism and a willingness to compromise to the demands of academic capitalism and managerial governmentality (Chubb & Watermeyer, 2016). 'Like moths to a light bulb moment' (Plowright et al., 2016), FUGuE researchers recognised in each other that we assertively conduct our research with integrity to values of reciprocity, relationships and transformative agency with and for Gippsland-global imperatives. This choice of marginal positionality, to research in the field of education, in the hinterlands and in a satellite campus of a small new regional university, means we are *ipso facto* consciously avoiding, rejecting or minimising an overly superficial professional pragmatism. It means we agree with Evans (2016, p. 219) who suggests that research should be understood as 'more-than-research' and that ethics of care

can produce varied outcomes that 'resist auditability'. It is these audit-invisible outcomes that we aim to reveal through this edited collection. And so, at a minimum, we join with Evans (2016) in her call for the inclusion of important benefits such as reciprocity, interdependence and collaboration into definitions of research engagement and impact and for recognition of 'alternative ways of being in the academy' such as ours.

Through juxtaposing samples of our research into this one volume case study, FUGuE thus challenges research assessment practices that tend to atomize researchers and their projects as the quantifiable unit to assess impact and engagement in positivist and neoliberal terms. In counterpoint and compilation, we thus disrupt what Bauman says is an 'incurably fragmented and atomized' world (2007, p. 14) to demonstrate that 'effective knowledge production is a… diverse and porous series of smaller transformative actions that rise through changed understanding among all of those involved' (Pain, 2014, p. 187). Like a Bach fugue masterpiece (Corazza et al., 2014), in which each voice has intrinsic integrity but together becomes a new form, our woven stories of transformative agency through educational research in our region, generate a new form and in so doing disruptively reveal our appreciable, but largely underappreciated, impact achieved through processual and reciprocal engagement.

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Part I
Regional University Educational Researchers and Transformative Partnerships

Chapter 2
Reflecting on a Nascent South Gippsland Birth-Year 6 Oral Language Partnership

Cheryl Glowrey and Susan Plowright

Abstract Addressing inequality gaps between and within countries is number 10 of the United Nations Sustainable Development Goals 2016–2030. In Australia, regional and remote area dwellers are disproportionately more likely to experience low socioeconomic circumstances, thus as Federation University Gippsland Education (FUGuE) researchers and neighbours, knowing this and that geographical context is an important factor in children's outcomes, it is not surprising we found ourselves meeting with the acting principal of the local primary school to offer our services. From this emerged a partnership between educational leaders from two small primary schools, a kindergarten and a local-government facilitated supported playgroup. Addressing delays in oral language development was considered to be a pressing educational and social justice concern in this relatively geographically isolated area with limited resources for maximising children's engagement, educational aspirations and outcomes for a just future. The partners co-designed a 12-month action plan with three strategies: shared professional learning workshops; extended placement of two fourth-year pre-service teachers in the schools; and trialling of an oral language enrichment programme for senior students. The accompanying research intended to evaluate the impact of these strategies and the partnership, however, was implemented in a limited way because of disruptions and complexities we report on. Rural communities though have resilience and rhythms that extend over longer timeframes than the average research project so as regional researchers and residents deeply committed to 'our place', we will continue to address the inequality gap we see around us by reinvesting in our region through our research.

Keywords Educational partnerships · Rural educational research · Rural social space · Oral language · Rural schools · Social justice

Note: Real names of participants in the research project have been changed in this chapter.

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Introduction

Addressing inequality gaps between and within countries is number 10 of the United Nations Sustainable Development Goals 2016–2030. In Australia, regional and remote area dwellers are disproportionately more likely to experience low socioeconomic circumstances (Gavidia-Payne, Denny, Davis, Francis, & Jackson, 2015). As Federation University Gippsland Education (FUGuE) researchers and neighbours, knowing this and that geographical, or 'ecological context' (Gavidia-Payne et al., 2015) is an important factor in children's well-being and outcomes, it is not surprising that we found ourselves meeting with the acting principal of the local primary school. We were both entangled in various ways with the fortunes of the school through family and the community and were aware that for a couple of years it had been experiencing the difficulties of recruiting an ongoing principal that rural schools often face (Halsey, 2018). We were also aware that in our relatively isolated and thinly populated rural locale in South Gippsland Victoria on the southern coast of mainland Australia, services and programmes for families and children are generally provided in larger towns necessitating travel, sometimes lengthy travel and often expensive travel by car, presenting a significant barrier for many in seeking and accessing additional children's services and programmes. We reasoned that we might be able to be a resource in some way.

Our first conversation in November 2016 turned to the acting principal's concerns about oral language, particularly phonemic awareness. She identified the early oral language proficiency of students beginning school as an issue requiring attention and one where we might make a difference. As the small kindergarten in the town was split across two sites, also feeding children into a second rural primary school ten kilometres along the highway, we then invited the principal of the other school and the kindergarten director into our deliberations. In the spirit of including all early childhood providers, the convenor of a supported playgroup facilitated by the local Shire Council and running a 'Small Talk' programme for toddlers and parents was also invited. The existence of this government-funded programme was an indication of the Education Department's concerns for the families and children in the village.

We all formed an enthusiastic cluster at our next meeting, with plenty of ideas and high hopes for the transformative potential of our new cross-sector, or inter-sector, Birth-Year 6 educational partnership. Together, we co-designed an action plan with three strategies for 2017 that would:

1. attract two fourth-year pre-service Federation University teachers on an extended embedded placement over Terms 1–3;
2. engage cluster educators in a shared professional learning programme, initially bringing oral language and literacy experts to the area; and
3. introduce an oral language extension project with the senior classes in each school, to simultaneously develop oral language skills and ethical capabilities.

Underlying principles of the action plan were to provide more adults with whom children could converse and to bring human resources into the schools (initially);

to bring expertise and opportunities to the area rather than having to travel out to access professional development and to foster cross-sector collaboration through new project ideas which we hoped would emerge.

This small vignette of our intentions and plans captures the embedded nature of the authors' rural education research, our auto-ethnographical lived experience as regional educators, residents and researchers and our hopes for transformative results based on facilitating and fostering relationships and partnerships. In this, we contrast to the analytical research conducted from outside of the community where the immediate evidence of rural disadvantage, decline and lack of opportunities become the focus (Corbett, 2015). This chapter then examines and reflects on our experiences as volunteer educators and researchers attempting to collaboratively support and engage with the new cluster that intended to pave new inter-sector ground and relationships in a relatively isolated rural locale. We recount, analyse and reflect on the complexities of forming and engaging in rural education partnership projects through our experiences over the 12 months of the action plan, as we were immersed in the realities of regional living, working and researching.

Our story challenges external assumptions about the cohesion and homogeneity of 'regionality' and 'rurality' as contrasting experiences with, and circumstances for, each of the schools emerged during the project, with significant 'churn' of acting principals and difficult principal recruitment processes in one school. Equally, despite our best intentions and efforts, some of the professional development arrangements and plans suffered from the perils, travails and time commitments of travel to further flung regions. So, while the small-scale data collected at the end of the year indicated that the forum of cross-sector clusters is a potential model for problem-solving complex local issues of learning and teaching, we find and argue that to overcome the factors of distance and to sustain a partnership through significant personnel change, goodwill and volunteer effort of partners alone are not enough. More tangible and practical support and some policy and technical infrastructure are required.

Debunking Regionality and Rurality as a Homogenous Experience

The research project, the South Gippsland Birth-Year 6 Education Partnership—2017 Action Plan, is located in a geographically isolated rural Gippsland place with low socioeconomic status indicators. Rural disadvantage is not always visible to outsiders, hidden by the diaspora of close-knit communities set amid picturesque farmland held in memories past of urban dwellers. Environmental beauty along the Gippsland coast, attractive to tourists and lifestylers, masks the circumstances of families with young children dealing with long-term social and economic restructuring, in this case, the ongoing globalisation of the dairy industry. Social disadvantage, mobility, family trauma and isolation contribute to the complexity where a range of hills and very limited public transport form a physical and psychological barrier to

accessing 'outside' services, illustrating why many children come to rural schools with educational disadvantages (Roberts & Green, 2013; White & Corbett, 2014). Equally, beyond the reach of a range of social and health services, many locals feel 'forgotten'.

Perspectives of rural schools as different and generally disadvantaged in comparison to urban schools have existed in Australia for decades (Halsey, 2018; Roberts & Green, 2013). While researchers have argued that the rural–urban divide is a matter of difference, rural schools in some places labelled as disadvantaged confront complex, intractable problems; 'wicked problems' that require an approach extending beyond the classroom (Reid, 2017). The recent Vinson Report (2015) into social disadvantage in Australia presents a fine-grained mapping of communities where disadvantage is complex and embedded, finding that both schools in this partnership are 'disadvantaged' and that for one school, part of the community is 'highly disadvantaged' and have been for more than 10 years.

Researching in these small schools demonstrated the importance of understanding the differences between communities, even when statistically similar and adjacent. As the unique factors influencing each school and community emerged, it was evident that generalised assumptions about positive and strong rural school–community relationships were unfounded at the grassroots level of small schools (Cuervo, 2014b; Hazel & McCullam, 2016; Pini & Mayes, 2015). Data on the Australian Government *MySchool* website for 2017 shows the similarities between the two schools, with one having an ICSEA (Index of Community Socio-Educational Advantage) of 989, a total of 37 students and 59% in the lower two quartiles and the other with and ICSEA of 996, a total enrolment of 31 students and 67% in the lower two quartiles. Four students with an Aboriginal and Torres Strait Islander heritage were enrolled at one school and none at the other. The results from NAPLAN (National Assessment Program Literacy and Numeracy) testing, lower in when compared to all Australian schools in 2017, were within the range of scores for schools with similar students.

In the 2 years of our involvement in the schools, both the NAPLAN data and the ICSEA values improved considerably from a low point in 2015, data that prompted the initial discussions with the acting principal. Enrolments had declined, suggesting that the changing circumstances in the schools were linked to the availability of employment in the communities, or families moving closer to larger centres. Our assumptions about the embedded and complex disadvantage in rural communities were challenged, as the children in the schools were clearly making gains in learning. The disconnect between the two data sets points to the complexity of disadvantage in rural communities and provides an indication of the extent to which young people from these communities leave for further education and employment in other places. While it is tempting to observe that in a rapidly globalising context, the transitioning of students out of local communities leaves behind a marginalised population, the reality is more complex as new people visit and relocate, creating what may be described as a diverse and layered rather than cohesive community.

Rural Social Space

The initial proposal for this project was to use a traditional research methodology, Community-Based Participatory Action Research (CBPAR). CBPAR is one among a cluster of participatory research approaches, including participatory action research (PAR), participatory rural assessment and participatory development (PD) (Janes, 2016). According to Montoya and Kent (2011, p. 1000), six accepted principles of CBPAR are:

> (a) the promotion of active collaboration and participation at every stage of research, (b) the encouragement of co-learning between community residents and researchers, (c) the assurance that projects are community driven, (d) the dissemination of results in useful terms, (e) the commitment to using culturally appropriate intervention strategies, and (f) the definition of community as a unit of identity.

They argue that CBPAR attempts to transform the 'researched into researchers' utilising 'dialogical action', a cycle of convening–reflecting–acting to facilitate 'co-learners who work together to act, reflect, and transform the world' (Montoya & Kent, 2011, p. 1001).

As the complexities of the project unfolded, it was obvious that we were immersed in research that was crossing disciplines, an emerging methodology rather than traditional education research (Somerville, 2007). According to Roberts and Green (2013), rural spaces need to be researched differently, where the 'interpretation and meaning making of such data require ethnographic work to understand the interpretations, experiences, and aspirations of rural communities, across their general similarities and among their particular differences' (p. 770). The concept of rural social space, which includes demography, economy, geography and culture of people and place, offered a suitable multidisciplinary or strategically eclectic approach (Roberts & Green, 2013). Rural social space, focused on the particularities of each place, allows for distinctions between rural communities and educational experiences for children (Reid et al., 2010). This rural standpoint challenges the views of policy-makers and outsiders who remain persuaded that communities per se have a generative capacity to solve their own problems (Corbett, 2015; Roberts & Cuervo, 2015).

Rural social space expands the dominant critical agenda of social justice (Reid, 2017). To distributive responses to social injustice, where additional resources are provided, rural social space adds *recognitive, representational* (*associational*) and *geographic* aspects of social justice, where the culture of students, the inclusion of students in decision-making and consideration of the context in which they live are considered (Cuervo, 2016; Roberts & Green, 2013). Namely, it accommodates the evolving methodological understanding of rural education research. As researchers who live in the community, the ethical nature of rural social space enabled us to agree with the research by White and Corbett (2014, p. 3), two eminent rural education professors, who argue that '…a predominant consideration [is] the impact of our research in terms of the "footprint" we leave behind and what ways the outcome of

the research might actually make a difference or improve the lives and places of those we research'. In this way, we could pursue an ideal of transformative rural education research through partnerships at the local level.

Sustainable Rural Communities

Rural communities are complex social systems, which work as a whole rather than as individual parts (Hazel & McCullam, 2016). The tendency to define rural schools as a single homogenous category to be compared to cosmopolitan values of the urban paradigm has contributed to the marginalisation of these schools and their communities (Roberts & Cuervo, 2015). Rural communities really matter to the health of the nation, and valuing place as the reference point for researching rural education opens new insights into the strength, resilience and opportunity for children outside of the urban norms (Roberts & Cuervo, 2015; Roberts & Green, 2013). It is not surprising that place is embedded in the first goal of the Melbourne Declaration of Goals for Young Australians (Halsey, 2017). Recognition that centrally derived policies and curriculum design overlook the knowledges and literacies of rural students and their schools is one aspect of this problem. Roberts (2017) argues that by excluding local curriculum initiatives, the Australian Curriculum with its focus on ensuring all children have an equitable access to the same quality in their learning may in fact contribute to the marginalisation of rural and remote schools. For teachers, this finding means 'constructing and implementing a curriculum that resonates with and is useful to the biographies and localities of young people'—known variously as "place-based education" or "trans disciplinary pedagogy of place"' (Cuervo, 2014b, p. 652; Somerville, Davies, Power, Gannon, & de Carteret, 2011). Establishing the relevance of the Australian Curriculum children in regional, rural and remote schools is the first priority in the recent review of education (Halsey, 2018).

The sustainability of communities through rural education emerged as a concern for this project. In his recent review on regional, rural and remote education for the Australian Government, John Halsey sets as a provocation the idea that the nation's food security will be dependent on healthy and sustainable non-metropolitan communities and schools (Halsey, 2018). The importance of high-quality rural education research is a priority as the global exploitation of marine and land resources continues to threaten future environmental sustainability (White & Corbett, 2014). The townships of the schools are situated in the catchment basin for Corner Inlet, the most southern estuarine embayment along the Victorian coast. Here, the extensive seagrass meadows are breeding grounds for a rich marine life and protected as national and state marine parks, yet their future depends to a great degree on efforts to manage levels of domestic, agricultural and industrial pollutants into the inlet. Globally focused agri-business is reshaping the local economic and social landscape with technology enabling large-scale single dairy farms where once there were several family farms. Environmental science, skilled use of chemicals and water management systems are expected knowledges for these farmers, their employees and the consultants who advise them.

As the communities in this part of the Gippsland region transition into a global economy, the ViPlus Pty Ltd milk processing factory in one town processing baby formula for China continues to employ more workers. Recreational fishing, the restoration of the Long Jetty in the other community, the Great Southern Rail Trail and new enterprises such as the boat trips to Wilsons Promontory are attracting tourists to the towns. Educating local children to participate in and lead this emerging economy is a matter for social justice and sustainability. Without this focus, young people are at risk of a lifetime of social, economic and health inequalities (Lamb, Jackson, Walstab, & Huo, 2015). The role of rural schools in contributing towards sustainable communities is an area of consideration, especially in addressing issues of attracting and retaining teachers (White et al., 2011).

The Action Plan

Cluster Professional Development: Challenges and Successes

The researchers posed the question: 'What are the perceived impacts of professional development approaches trialed by and for the birth-year 6 educators in this partnership'? Improving literacy outcomes for students through professional development of teachers is a well-researched strategy (Parr & Timperley, 2015; Snow et al., 2014). The relationship between literacy difficulties, socio-emotional development and behaviour in education may all be linked to oral language competence. Oral language is linked to how the mind develops, forming friendships and relationships, express feelings and needs and represent ideas (Snow et al., 2014; State of Victoria, 2018). Children who have reduced oral language competence when they begin primary school are more likely to have difficulty socially, behaviorally and to encounter mental health problems during their lifetime (Snow et al., 2014). According to Siraj (State of Victoria, 2018), vocabulary at 3 years of age is a predictor of reading levels at 10 years. Reading levels are a predictor of education outcomes and lifelong employment opportunities (Lamb et al., 2015). Students who have reduced oral language competence when they start school require rich language experience with adults and literacy to make up some ground. A recent research study examining the impact of targeted professional development for teachers in the early years conducted across 14 Catholic Education schools in low SES contexts concluded that such a strategy was effective (Snow et al., 2014). Children who do not meet the readiness milestones at the start of primary and secondary school can make gains to succeed (Lamb et al., 2015).

As researchers, our first aim was to facilitate professional development otherwise not available to the educators and innovate cross-sector professional collaboration around oral language learning. As Halsey (2017) notes, 'for employed teachers, timely access to high quality, relevant, regular and affordable professional development is crucial for building and sustaining their effectiveness' (p. 25). In his final report on regional, rural and remote education, Halsey recommends the develop-

ment of clusters with partnerships with a university or similar body to introduce professional development in situ (p. 43). Our project was an initial step towards this recommendation. The cluster approach to professional learning was based on the notion of a learning continuum for oral language. We wanted to take a holistic approach to developing oral literacy as the Principals noted that children were starting school with significant issues.

As a cluster, we agreed to hold professional development every 3 weeks alternating between the schools and kindergartens in the two towns. The two primary schools committed to allowing this to occur on one of their valuable meeting nights and to work later than normal so that other educators could travel to reach the meeting. In addition, the host school provided afternoon tea, generally contributed by the staff themselves. The goodwill involved was high. As university researchers, we prevailed on friendships and partnerships to invite presenters to travel to South Gippsland, with the offer of a free meal at the local hotel before driving back over the mountains in their return.

The same geography that isolates families limits the access to professional learning for teachers. Small school budgets restricted the capacity of leaders and teachers to attend professional learning during the day and after school. The wait for school buses to arrive and depart meant arriving late at any activity scheduled to start at 4.00 pm. Geography and distance became an issue for the facilitators we cajoled into delivering professional learning. The two and a half hours minimum return trip was daunting, and, in the end, two facilitators were unable to attend. One of these had a flat tyre on a notorious stretch of road after two hours of travelling from Melbourne, forcing the cancellation of the session.

Assumptions that teachers and staff will travel to a larger centre for cluster-based professional development do not necessarily work for small rural schools where budgets for time release are small and after school duties such as waiting for buses to pick up students add further restrictions on attendance. Barriers to the success of this strategy emerged early when we realised that the pre-school educators had limited access to professional learning time and that because they were stretched across two communities and finished their day before schools did, a late afternoon timeslot for meetings was not convenient. The playgroup was delivered by a professional who lived some distance away and again, found attending a late afternoon session when they had running mid-morning programmes that finished at lunchtime required additional driving that wasn't part of their role, despite support from the managers.

The successes were remarkable, as educators and teachers met to share in professional learning. Schools found this was notably different to the problematic situation of driving to a distant professional learning. The topics covered included rhythm and oral literacy, embedding opportunities for nurturing oral language growth into real literacy episodes or events in the classroom, and strategies that work. An early session explored the importance of possibilities of embedding the local in the curriculum as a way to scaffold learning; an idea that affirmed the work of teachers who were trying to bridge the interests of the children and the demands of the Victorian Curriculum. The comments from one of the school principals highlighted the networking benefits of clustering for professional development and the overall benefit

of building relationships with the pre-school and playgroup educators through the project. Anecdotally, the pre-school educators were delighted to be able to learn together with the primary teachers noting that this was the first time such an opportunity had been offered. In an interview, Sophie, a teacher at one of the schools, highlighted the way the presentation on using picture storybooks to promote talking had been incorporated into the whole school literacy programme straight away.

A professional development session was planned with the principal from a regional primary school located in the Latrobe Valley who shared the same issue of students enrolling with developmental delays in oral language skills. The principal was unable to travel to the schools which highlighted a key challenge for the rural cluster. An agreement to use video conferencing failed at the last minute when a lack of technical support to fix a fault meant that one unit was out of service. Our attempt to conduct professional development using a mobile phone on speaker was a salient lesson in the impact of geography as a deterrent for teachers and schools working together. Despite the difficulty, the schools expressed interest in working together.

In his recent report into regional, rural and remote education in Australia, Halsey (2018) recommends that the provision of ICT is a means to improve educational outcomes for students and schools. He recommends adequate technical support as a factor in this. Further to this, we suggest that the mismatch of operating platforms for video conferencing between sectors providing education is an issue for clusters in rural communities. Video conferencing equipment is different in government and non-government schools, Technical and Further Education (TAFEs) and the university. In 2012, government secondary schools and some primary schools received equipment funded through the Building Education Revolution (BER) roll-out from the Federal government. Catholic schools have a different platform. Following the Gippsland Tertiary Education Review report (Lee Dow, Allan, & Mitchell, 2011), the Minister for Higher Education and Skills, Peter Hall (Member of Victoria's upper house) launched the Technology Enabled Learning Centres (TELCs) for TAFES and outreach campuses in 2013 to integrate the provision of technical education across the region using an ICT platform that was different to that of the schools, while the university platform was different again. We would argue that collaboration at the level of provision of ICT infrastructure across sectors could significantly change the regional and rural education landscape in Gippsland by enabling partnerships to work.

Pre-service Teachers

The difficulties of attracting and retaining staff in rural schools are well understood (Halsey, 2018; Roberts & Green, 2013; White, 2015; White et al., 2011). Fluctuating student numbers due in part to precarious rural employment opportunities add unpredictability to staffing and staff continuity to some of the partner education sites. Offering rural school experience through initial teacher education programmes has

been proposed as a solution, and more recently, specific training in the skills and attributes for teaching in rural and remote schools recommended (Halsey, 2018).

In our research, we looked for a reciprocal relationship, where pre-service teachers gained experience, and children in the rural schools benefitted from an additional adult focused on improving oral literacy as a model for transforming future learning success for students. This involved the placement of two extended practicum fourth-year pre-service teachers, one student allocated to each of the schools, completing up to 40 days practicum with a focus on oral language development. As researchers, we made a 'pitch' to the fourth-year primary undergraduates about our project at the two small rural schools and requested interested students who would like to complete their practicum at these schools to contact us. We were delighted to have two local students, Holly* and Paul*, join the project team, both as students and researchers. Research shows that the majority of graduate teachers applying for rural schools have a connection to the community (Hazel & McCullam, 2016). Their contribution to the learning of the children and exploration of oral literacy was significant, although measuring the impact of pre-service teachers on this key aspect of development has proven more difficult.

In an interview conducted mid-way through the year, the two pre-service teachers discussed the opportunities and challenges of their placements. Holly listed two benefits, the first of which was developing deep relationships with her students which then influenced the depth of her curriculum planning. In addition, she found that being able to introduce place and community to the classroom promoted stronger relationships with the students, in particular, using Wilsons Promontory as a familiar landmark to teach geography. Holly, who taught in the Prep—Year 2 class, was not from the community and made a point of learning about this deliberately to connect to and extend the existing oral language experiences of the students. Paul, who found himself to be the only male staff member in his small rural school, commented on the opportunities he found to extend conversations with students while sharing their interest in playing basketball, adding that 'talking about basketball with him, like he probably never got that opportunity before….'. Paul noted the critical nature of rural school relationships particularly when a student may have the same teacher for 3 or more years of their primary education.

Emerging research results from a current Federation University project indicate that fourth-year pre-service teachers on immersion placements are more likely to experience success and see themselves continuing in the profession (Cooley, Plunkett, Sellings, & MacGregor, 2017). Further to this, an average of 70% of students who graduate from regional universities are employed in regional Australia (RUN, 2018). In our project, both students expressed enthusiasm about working in a small rural school after their experiences on placement during the interview. However, in a seminar with peers at the university, they reported feeling that working in small rural schools for the year had disadvantaged them. Sharplin states that pre-service teachers are faced with *negative stereotypes and insidious unknowns* of rural schooling (Sharplin, 2010, emphasis original). In particular, professional development was problematic compared to the experiences of pre-service teachers placed in larger regional schools. As Holly articulated, 'because we're rurally isolated, people com-

ing from Melbourne …are not necessarily going to want to drive two and a half hours …to do two hours of PD'. As fourth-year pre-service teachers from a regional university, Holly and Paul were also experiencing the gap between the larger schools and the small rural schools.

The richness of experiences for the two pre-service teachers was balanced by the appreciation of the school principals for their contributions. In the scramble for employment at year's end, both students were appointed to neighbouring, larger schools based on these experiences where they had played a significant role in the strategic planning of both schools, worked in teams to develop learning and understood relationships and community. The highly demanding context of small rural schools compared to larger sites is a recognised factor (Halsey, 2018). Our journey with Holly and Paul underscored the importance of preparing pre-service teachers for a diversity of rural communities and for teaching in classrooms where students are at different developmental stages and year levels (White, 2015). The strength of the cluster approach enabled them to share experiences across the two schools and to engage with the kindergarten educators, community members and the playgroup convenors.

The Children's Council Project

The aim of this action plan strategy was to provide an oral language enrichment opportunity for the senior classes in both schools. Susan also saw it as a way to contribute 'human resources' to the schools through team teaching the programme one hour per week in each school and to work closely with each of the fourth-year placement students. This action plan strategy became known in hindsight as the Children's Council project, because ultimately a children's committee or youth council was established by children at each school at their own behest and initiative. The learning design and theories that underpinned the project are set out in detail in Chap. 3 of this volume, which narrates and theorises the reflections of Susan and the teaching principal and classroom teacher about the trajectory and transformative outcomes of the project in that school. In short though, some of Susan's ideas from her doctoral thesis were married with the ethical capabilities and speaking and listening areas of the Victorian Curriculum. What evolved through student voice and agency was a rich oral language learning environment and an inspiring growth in the children's public speaking skills and confidence.

Discussion

Schools and the Community

Experience in this project highlighted the fragility of partnership relationships. One school struggled to find a suitable principal and entered into a process that lasted for about 12 months. A second acting principal, experienced in small rural schools elsewhere in the region, was appointed for 6 months before a new principal was found. As the young parents on School Council fought through three iterations of a principal selection panel, the shaky trust relationship with the community resulted in some families leaving the school. This rural community, with traditional industry and demography in decline, is adjacent to a stable community growing as tourists and lifestylers add to the economy (Corbett & Forsey, 2017). With more accessible early childhood services and larger schools, including the secondary college, some parents elected to enrol children in the town ten kilometres in the other direction. The process also created internal challenges for the staff and our student teacher at the smaller school.

While our research effort focused on the early years, parents concerned for the future sought transitions to larger education centres for their children, particularly those in the upper primary classes. In a sense, aspirations for their children and future achievements were at the expense of loyalty to their local community and school, a pattern Corbett describes as preparing children for their 'mobile futures' (Corbett, 2015; Corbett & Forsey, 2017). In this way, rural schools and teachers contribute to the decline of their communities by promoting student achievement that will see young people transition out of their rural community (Corbett, 2015).

The decisions that parents make on behalf of their children are critical in rural schools, as it also impacts on the agency of the students too. A qualitative research project examining the responses of secondary students about their education in rural schools highlights the very real understanding of transitions for these students who 'identified themselves as part of a social group defined by place (rurality) and were aware of the structural barriers that hamper their educational possibilities' (Cuervo, 2014a, p. 551). Rural students grow up knowing that they need to leave their community to further their education and career, economically and socially yet at the same time, are expected to support their local community in loyalties and sport (Cuervo 2014a, b).

As researchers, we were aware of the Victorian Department of Education and Training's (DET) accountability measures the two schools were managing as they both prepared for a Strategic Review of the outcomes of the previous 4 years and the rigorous process of establishing new priorities for the next 4 years. In both schools, oral language development was named as a key goal and staff were attending professional learning provided through the school. Our cluster work had influenced this by raising the issue and providing some initial theory and actions for changing classroom practice to achieve this. We found, anecdotally, that our presence as university researchers was welcomed by the schools and their communities as an investment

in the feelings of optimism in the schools. Hence, the DET invested in the notion of small rural schools' clusters and reinvigorated the broader cluster of schools across a larger geographic area. The commitments to the small local cluster were shared with an insider system cluster across a much wider geographic distance, where the research focus was also highlighted.

Regional Research Partnerships

There were some important lessons from our research experience in tackling a complex problem. As a cluster partnership, we were all volunteers and, in this sense, working outside or parallel to the systemic clusters for the schools and early childhood providers. Our university-based research was unfunded, although supported through the School of Education. Clustering at the local level makes sense in rural areas as a way of effectively using resources. Halsey (2018) recommends the establishment of cluster partnerships for regional, rural and remote schools in Australia working in partnership with universities. We would argue that when it comes to an issue such as the lifelong implications of poor literacy, where there is a locally identified problem of oral literacy at the early childhood developmental stage that we need to form cross-sector clusters as a model for problem-solving complex local issues of learning and teaching. In other words, there is a need to go beyond the boundaries of traditional school sector clusters operating across a district and invest in school–community problems at the local level of place.

New Zealand researchers Parr and Timperley (2015) examined a scale of collaborative research partnerships between universities and schools based on the way teacher professional knowledge is developed and the efficacy of change. Traditional research partnerships between universities and schools designed to improve student outcomes were based on an investigation followed by an evaluative report that informed policy and practice (Parr & Timperley, 2015). Such a research relationship, termed as a 'loosely coupled' collaboration (Parr & Timperley, 2015, p. 31) means that the knowledge is given to the schools or system at a defined end to the project and changes to practice often limited. Research partnerships based on intervention at the local level, often adaptive in action and integrating theory and practice, are more successful in bringing about change (Parr & Timperley, 2015). This formative research practice in university and school partnerships is most effective when partnerships are collaborative, enquiry focused, evidence-based and build the evaluative capacity of all members as researchers (Parr & Timperley, 2015).

Achieving a collaborative research partnership of this nature is based on relationships, and the building of trust in the cluster 'while challenging one another to effect improvement' at the same time as remaining responsive to the needs of the cluster (Parr & Timperley, 2015, p. 35). The participatory nature of the project, the overlapping roles between research and professional development and the application in context are features of partnerships where the focus is on co-constructing for school improvement (Parr & Timperley, 2015). In the United States, Coburn, Penuel, and

Geil (2013) further emphasise the importance of trust in developing research–practice partnerships where the focus is on the longer term to respond to problems of practice, a reciprocal willingness to accept change and an intentional fostering of the partnership to create new knowledge.

While the intent of a place-based research partnership was to build a deep understanding of the context for children and learning, the informal collaborative partnership at the two rural primary schools, the kindergarten and the playgroup did not survive the challenges of changing leadership and the geography of isolation at year's end. In the community sector, a recognised success factor in cross-agency cluster partnerships working to address complex problems at the local level is the commitment to a long-term relationship of 5–10 years where the group move beyond cooperation to collaboration (VCOSS, 2016). Despite its failure to develop, the cluster model of our research project fits within the emerging research partnerships between schools and universities. It also enables a rural social space approach to understand the context for each community within the context of local social, economic and environmental considerations (Reid, 2017).

We advocate the need for a shift to formal and funded cross-sectoral partnerships between regional universities, schools and other education providers at the local rather than a wider district level as an effective model to leverage change for teachers and students. Teacher educators from regional universities are well placed to undertake the role of partner in these clusters. This is based on the work of preparing pre-service teachers who will be employed by schools in the region, and the established relationships researchers exemplified through FUGuE across a range of localities and our commitment to sustainable regional communities.

Conclusion

Traditional research plans to gather data through reflections, surveys and semi-structured interviews on the educators' professional development; the experience of the Federation University students and their contribution to the 2017 Action Plan; and the general impact of the partnership configuration and Action Plan strategies on all participants and students at mid-year were abandoned as events precluded any meaningful outcome. A limited number of surveys and data were conducted at the end of the year. An initial meeting at the beginning of 2018 revealed that despite enthusiasm for the continuation of the project, there was no planned time for professional development. Our research partnership and the contribution to the sustainability of these communities will continue for some time to come as new pre-service teachers are placed at the schools and the principals are meeting again to plan the coming year.

As rural education researchers, we have grown with the project despite the challenges. Each of our circumstances has led to differences in how we engage with the schools and the partnership. For one of us, travelling away from the community to work at the university everyday has created a type of 'fly in, fly out' effect as

a researcher, while, for the other, working close to home has enabled relationships to develop in the schools. Reflecting on the transformational nature of our research project confirms that this embedded and dynamic work in rural schools is an ongoing process that requires investment, time and commitment. It would be possible to end the project after 12 months on a note of critical theory with a deficit conclusion. We are, however, choosing to continue and allow the research to evolve in keeping with the relational nature of our ethic from the beginning. Rural communities have resiliences and rhythms that extend over longer timeframes than the average research project. As researchers, we have been transformed by this project with a much deeper understanding of rural literacies in small schools and of the rich life that exists outside of formal education for these children. The teachers, our pre-service students, the children and the parents have all been touched in some positive direct or indirect way by this project and this is what we hope to extend in order to reinvest in our region through our educational research. This investment ethic and relationship FUGuE researchers like us have to our research qualitatively illuminates the importance of regional university campuses and regionally located and committed educational researchers who are prepared to devote time and attention to 'small' projects not necessarily valued in discourses of research impact. This chapter similarly illuminates the value of the FUGuE space where our 'small' work is noticed, encouraged and celebrated for its worth to our corner of the world and the (bio)diversity of educational research.

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Chapter 3
'Little School, Big Heart': Embracing a New Partnership for Learning Generous and Ethical Judgements

Susan Plowright, Gabbi Boyd and Sophie Callcott

Abstract For educators and educational researchers who value democracy and planetary sustainability, our times present pedagogical challenges. The (re)emergence of populism, alt-right violences and the pressing climate crisis, among other global matters, present a dilemma. How do we simultaneously foster the will to form generous, ethical, judgements and actions in students, while meeting their immediate needs and the myriad curricula and governance demands placed on schools, from the context of local circumstances? In response, Susan, a Federation University Gippsland Education (FUGuE) researcher; Gabbi a principal/teacher; Sophie a part-time teacher; and a year's 4–6 class, embarked on a yearlong project to see what might be possible from the context of a relatively isolated and tiny Victorian government primary school in the rural/coastal area of South Gippsland, on the southern coast of mainland Australia. Together, in a new partnership, we aimed to simultaneously expand students' oral language experiences while cultivating an 'encompassing ethic', an idea from Sue's doctoral thesis. This is the will and capability to visit standpoints of others—human, non-human, past, present and future—in order to encompass the widest possible range of perspectives before forming judgements, speaking and acting. We synthesised this 'going visiting' with the Speaking and Listening mode, and the Ethical Capabilities area of the Victorian Curriculum. The project emerged as a productively and inspirationally transformative one for many of us. So, this chapter reflects on and theorizes the factors that produced transformational possibilities from a small rural school, which enacted its motto of Little School, Big Heart.

Keywords Small rural school · Educational partnership · Democracy · Ethical capabilities · Encompassing ethic · Going visiting

Gabbi Boyd and Sophie Callcott's school names are kept confidential.

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Introductions

> *Sue*: So, we've got PH, Sophie Callcott, Gabbi Boyd and Sue Plowright and it is the 19th of June 2017. … So, we're talking about, kind of, the Children's Council Project that's been going on in your, Sophie and Gabbi's, shared class all year. So, if anybody's got any initial thoughts just to get the ball rolling that'd be good.
>
> *Sophie*: Well we're nearly at the halfway point now …

…the halfway point of the 12-month project, provisionally (or 'kind of'!) named the Children's Council project in the grades 4–6 class of a tiny regional Victorian primary school that we'll call Wilson Primary School, with the school motto *Little School. Big Heart*. The participants in this reflective dialogue are Gabbi Boyd the teaching principal; Sophie Callcott who shares teaching of the class with Gabbi; PH a Federation University fourth year student on extended placement and Sue Plowright, a sessional lecturer and founding member of the FUGuE (Federation University Gippsland Education) research collective. At the time of the conversation, the Children's Council project had been occurring one hour per week since early in Term 1 2017, as one of three action plan strategies of a Birth-Year 6 Oral Language partnership project (see Chap. 2 by Dr Cheryl Glowrey, Sue's FUGuE colleague for details of this partnership and action plan). Sue designed the learning activities and team-taught with Sophie and Gabbi at various times in the year. The agreed aim was to provide an enriched oral language learning opportunity for the senior class through, and while, exploring pedagogical approaches for teaching an 'encompassing ethic'. Sue developed this theoretical idea in her doctoral thesis. Simultaneously, these learning occurrences integrated the Speaking and Listening English mode with the Ethical Capabilities cross curriculum area of the Victorian Curriculum.

The underlying architecture for the project was based on the five canons (or elements) of rhetoric, which for Aristotle is the art of ethical persuasion (Aristotle, 350BC). Thus, we trialled pedagogical ideas based on Aristotle's theory of invention—the first canon of rhetoric, as well as the other four canons of *arrangement* and *style*, which involve the tailoring of speech to be persuasive for the intended audience; *memory*, or memorizing techniques; and *delivery*, which covers posture, choreography and so on. Invention involves the learning and thinking processes required to construct or invent (new) content and ideas as a mode of persuasion (Aristotle, 350BC, Book 1 Sect. 2.2). Sue imagined the project would conclude with a 'big event' that might be a children's council meeting, complete with a 'public gallery', for example. However, the topic and event were to be decided by the children through inventing and presenting their own ideas, arguments and propositions throughout the year… beginning with the mystery of the Pale Blue Dot.

> *The pale blue dot*
>
> In the very first lesson, I (Sue) showed the children a grainy picture with an arrow pointing to a small pale blue dot among a wallpaper of blurry dots (as explained below). I asked the children to wonder what it could be and to present their ideas as propositions, stating clearly their proposal and rationale*.
>
> They proposed it could be a parasite, a star, a satellite, a kink in a laser beam of light, a hole in a curtain, a spot in a body of water…. The next week I honoured these conjectures by finding

pictures that suggested they could be 'plausible'. 'Plausible' was a key tier 2 word of the project and by years end many children had integrated it into their vocabulary. Broadening tier 2 vocabulary was a key project intention. To begin with I consciously selected vocabulary but a 'happenstance' approach emerged where I pounced on 'wow' words as they arose and thereafter wove them into dialogues, prompting the children to use the words themselves. Several children chose to focus on this vocabulary in the display we were working on at the time of the recorded conversation. For some reason 'p' words became prominent and a project in-joke!

The children were fascinated that the pale blue dot was a picture of Earth taken in 1990 from the Voyager 1 spacecraft launched from NASA in 1977, which was still travelling outwards and at the very edge of our solar system at the time. My purpose was to infuse a sense of awe and wonder both about our global home but also of the phenomenal capacity of humans to transform from an Earth-bound perspective, as did Karl Sagan the visionary scientist who persuaded NASA to take the photo to see what Earth might look like from a previously unimaginable perspective. I aimed to cultivate a quest to wonder, to go in search of, to imagine and 'encompass' what other perspectives might be 'out there' to foster inventive and generous ideas.

This guiding principle emerged from an intriguing phrase used by Hannah Arendt that became central to my doctoral thesis: "to think with the enlarged mentality—that means you train your imagination to go visiting" (Arendt, 1978, Vol. 2, p. 257; see also Plowright, 2013). So, from the very beginning we went visiting other perspectives in preparation for finding ethical ideas for arguments, in contradistinction to proffering self-interested opinions.

**Speaking and Listening mode—English Victorian Curriculum F-10 (2016): Participate in formal and informal debates and plan, rehearse and deliver presentations, selecting and sequencing appropriate content and multimodal elements for defined audiences and purposes, making appropriate choices for modality and emphasis (VCELY367).*

The data this chapter draws on includes one 45 min recorded reflective conversation between the four of us. This was a data collection method approved by Federation University Human Research and Ethics Committee to research the perceived impact of the three action plan activities of the umbrella oral language partnership project. The chapter follows the reflective flow of the conversation through excerpts of the transcription chronologically set out in italics at the top of each section. Each section then picks up and simultaneously explores multiple threads and themes as they emerge through the recorded words. The chapter form borrows elements of a magazine or Wikipedia format to cater for and represent this simultaneity and to enable all the participants who enacted the project, especially the children, to access the chapter in some way, while simultaneously contributing scholarly rigor and theoretical depth to a researcher audience.

Simultaneity was a founding principle of the Children's Council project design. Davis (2008, p. 51) proposes that simultaneity can be used:

as a contrast to the modern and Western habit of thinking in terms of discontinuities around such matters as theory and practice, knowers and knowledge, self and other, mind and body, art and science, and child and curriculum. In the context of popular debate, the terms of these sorts of dyads tend to be understood as necessarily distinct, opposed, and unconnected, even though they always seem to occur at the same time. In other words, such simultaneities tend to be seen as coincidental, but not complicated. Complexity thinking troubles this habit of interpretation and, in the process, offers important advice on the projects of education and educational research.

Through reading the simultaneous threads of this chapter, we attempt to draw the reader into the sense of occasion we argue this pedagogical and research project became. "Occasioning" refers "to the way that surprising possibilities can arise when things are allowed to fall together" (Davis, 2005, p. 461). This enactivist principle was a key theoretical underpinning of the project. An enactivist approach to teaching provides "occasions for (inter)action recognizing that the students' meanings and understandings are developed through and revealed in such action" (Begg, 2002, p. 8), meaning teaching is less about predetermination and control and that curriculum emerges through the interactive space provided. We aimed to create the time and space for things to 'fall together' so that each learning occasion was responsive to serendipitous occurrences but underpinned by the well-theorized and structured pedagogical foundations of invention, rhetoric and an encompassing ethic. As such, together, interactively and enactively, we created a year-long inventive occasion.

Here We Sit

The four of us sat and reflected conversationally for 45 min in a very rare chance to shut all the priority-juggling and myriad demands outside the staffroom door. From the vantage point of hindsight, this conversation would be the first and only time Sue ever saw Gabbi sit in the staffroom, or sit anywhere, for 45 min! Clarke and Stevens (2008) discuss the 'double load' of teaching principals in small rural Australian primary schools and argue "that the challenges encountered by these principals in engaging with the complexities of continuous improvement are often accentuated" (p. 278). This was certainly Sue's observation seeing Gabbi, in quick succession, deal with an unfortunately placed birds' nest; supervise the watering of new plants; eat lunch on her daily yard duty commitment while managing squabbles; and engage in deep pedagogical and organisational discussions with Sue closely preceded or followed by a steady stream of teachers, parents, departmental visitors, specialist teachers, preservice teachers and other students on placement. As Maxwell and Riley (2016, p. 485) observe, principals continuously meet with people at a range of developmental levels and must seamlessly switch from one interaction to the other. Gabbi does all this on top of a substantial teaching load because while Sophie teaches the class on Mondays and Tuesdays, Gabbi teaches on Wednesdays and Fridays with other arrangements for Thursdays.

Equally, while Sophie is formally employed for two days per week, Sue noted that Sophie was often at the school on her days off to bring in a new lamb; tend to the new chickens or the hatching chicks; paint something or organise the new garden and landscaping. Etc. At the school, apart from the 4–6 class, there is one other class of around 14 prep-3 children with a dynamic full-time teacher who has been at the school for six years. Both classes are co-located in one double 'portable' classroom and mostly the sliding doors between them are open. In the mornings, children are grouped into ability levels across all ages for targeted literacy activities. There are invariably several other adults around at any one point in time contributing

and participating in some way. One, well-loved extra was PH, the preservice teacher from Federation University who joined our conversation.

With around 33 children in 2017, the school serves a village, which in the 2016 census numbered 331 persons, and the wider district that includes a small operational commercial fishing port; dairy and other farming families from surrounding farms; tree and sea-changers, weekenders among the mix of the population. The school sits in the middle of paddocks next to a simple wooden church at the edge of the village. The village and district are nested at the foot of a semi-circle of rolling hills that, with the mountains of Wilson's Promontory to the south, form an amphitheatre. These protective hills and mountains shelter a wetland of international significance (see Chap. 1 this volume) and create a landscape of sweeping and stunning vistas, but also a topographical delineation between 'us' and the outside world. We can feel cradled and secluded in a beautiful retreat or trapped and isolated facing a daily challenge to connect to services, depending on our circumstances. The area was the site of the earliest white settlement in Victoria and was once mooted as the site for the state's Capital. It is now though on the political and geographical periphery in the 'western' governance system sense, sitting at the very outer reaches of the local government area of South Gippsland Shire and beyond the reach of many services and service providers coming from either east or west (refer Chap. 1). Locals thus depend on car travel and significant travel times to access almost all services as the only public transport available is one bus running along the South Gippsland Highway 3–4 times a day, or school buses headed west in the mornings and east in the afternoons. The village's very limited services include a part time post office and community bank outlet, a small milk bar/grocery store with petrol bowsers, a lawn mower shop and of course an expansive country pub on a prominent corner in the middle of 'town'.

With these initial introductions to the project, key protagonists, settings and theoretical underpinnings complete, we turn to theorizing possible factors contributing to the project outcomes, which exceeded any we could imagine. If transformation is to start something new, change something in a 'good' way, then the Children's Council project emerged as a transformative one. We managed to transcend the perils of partnerships (see Chap. 2), and transform children's public speaking tears and fears into powerfully moving performances, revealing that when we adults make space for them, they can be extraordinarily capable and visionary people. The project metamorphosed hopeful theory into hopeful practice, the story of which we share here for those educators and educational researchers who value democracy and worry about the (re)emergence of populism and alt-right violences; for those who value global sustainability and worry about the pressing climate crisis, among other regional-global matters. Through theorizing some of our recorded reflections and narrating project occurrences, our story tells how we made space for the children's will and capability to form generous, future-oriented judgements. But importantly we show how we were able to simultaneously meet individual developmental needs and the myriad curricula and governance demands placed on schools—all from the site of a particular, very small, regional rural/coastal school.

‘Embracing of It All’: A Milieu of Constructive Social Cohesion

> *Sophie:* Well we’re nearly at the halfway point now and I think the kids are very comfortable and settled with Sue in the classroom as a new face in the classroom. …they’ve been very embracing of it all and have been willing to give anything a try really which is one of the things that I’ve really noticed ….

‘Embracing of it all’ nearly says it all. A capacity to keenly ‘embrace’ and give the new and unusual a go, enhances the potential for things to ‘fall together’ in transformative ways. Sue observed from the very beginning that this was a key attribute and ethos of this class, the educators and broader school community. It was an attribute Gabbi demonstrated when she was instantly keen for her school to be involved in the oral language partnership project, despite her students already tracking well and the school day and year being very full. Sophie too, generously embraced the project, for example, graciously hiding her surprise and dropping everything when Sue arrived for a meeting well before the message that she was coming arrived. The children matched this attitude as Sue confirmed in response to Sophie in the recorded conversation, “I’ve found them [the students] just really very welcoming”.

We argue that a factor contributing to the embracing attitude, was the notable social cohesion of the class and school as a ‘social unit’ (Schiefer & van der Noll, 2016, p. 589). This is a characteristic often associated with small schools as Halsey (2011) notes, because they are of a scale with which most people can feel relatively comfortable and where trust is more likely to develop and be sustained, although there is also some risk of parochial ‘not-in-my-backyard’ mindsets (pp. 7–8) among small groups or social units. Wilson Primary School (WPS) was characterized by trusting relationships, an embracing, open door policy and anything but a not-in-my-backyard orientation.

> *Deckchair dreams*
>
> In 2011, for three hours daily throughout May, a group of climate activists and I took a deckchair to Victoria’s Parliament House. This act signified the shuffling of the deckchairs on the Titanic, an analogy for ineffective human action in the face of the looming climate disaster. Our Deckchair Democracy invited passers-by to engage with us in dialogue about the future of Earth and included a daily speaker. Some visitors recorded a video message that we posted online, along with letters from children, photos and petition signatures, all of which state and federal politicians received.
>
> Fast forward to 2017. I rescued the deckchair from the dusty depths of my garage, spruced it up, took it to school and showed pictures of its adventures. I wanted to model that speaking and listening in a democracy are both rights and responsibilities and that democracy is dependent on listening, speaking and coexisting with all sorts of people, even those with whom we disagree*. At the same time, we watched and discussed an excerpt from Martin Luther King Jnr’s famous ‘I have a dream’ speech: “I have a dream that my four children will one day live in a nation where they will not be judged by the colour of their skin, but by the content of their character”.
>
> The children then shared their dreams for the future from the deckchair. For each speaker we had a cameraperson, a timekeeper and a reflector to summarize and demonstrate listening skills. All other children took notes. Speaking for at least one minute and elaboration became

a key goal because most children were very brief. These video presentations became the first of four presentation recordings. I originally and mistakenly gave children the choice, but Sophie perceptively asked them all to rise to the challenge. For a small number who crumpled at the thought, she negotiated taking the deckchair outside and recording with a small audience. This strategy, and trust in Sophie, ensured that almost every child had a video recording from an early stage in the year through which they could self-evaluate their progress, and which enabled Sue to write learning stories at the end of the year that narrated their progress.

The expansive, generous and 'encompassing' nature of the children's dreams was inspirational. There were calls to find cures for cancer; to solve the issue of ocean and air pollution; to provide accessible services for people experiencing homelessness and for the happiness of children; to find innovative recycling solutions for metal waste…

**Ethical Capabilities Victorian Curriculum F-10 (2016): Explore the contested meaning of concepts including freedom, justice, and rights and responsibilities, and the extent they are and should be valued by different individuals and groups (VCECU014).*

We argue here that the concept of 'social cohesion' is a better descriptor than 'social capital'. For our needs and purposes, Carrasco and Bilal (2016) provide a useful definitional distinction utilising Eric Fromm's differentiation between social cohesion as a state of 'being' and social capital as the acquisition of socially valuable 'goods', such as influential contacts and networks for purposes such as social mobility. It is Wilson Primary School's state of being a socially cohesive social unit characterized by trust that was the notable character and value of the school and is thus the focus here. However, as a term it itself has multiple meanings (Carrasco & Bilal, 2016; Schiefer & van der Noll 2016), thus the meanings we ascribe to it need explanation and theorization. According to Scheifer and van der Noll (2016), who conducted an extensive review of English and German academic and policy literature, most scholars agree that social cohesion is a desirable characteristic of a social entity. However, below this broad consensus was such a diversity of definitions and conceptualizations that they argued it was a "hybrid construction" (Schiefer & van der Noll, 2016, p. 580). Carrasco and Bilal (2016) lend weight to this analysis by mapping various applied meanings from differing disciplinary domains. They found sociologists tend to focus on the social bonds of a society while social psychologists focus on social bonds and processes operating among small groups. A third characterization, by social epidemiologists, was that social cohesion was considered to be the degree of connectedness and solidarity between and among groups in a society. Other characterizations included conceptualizing social cohesion as a factor of community mobilization and empowerment to assert rights or resist and subvert oppressive social norms.

The fog of definition of social cohesion is however underpinned by three core dimensions (Scheifer & van der Noll, 2016, pp. 586–589). The first they identified is conceptualizing 'social relations' as the quality and quantity of social interactions between individuals and groups. The second is a strong identification of the group members with, and a sense of belonging to, the social unit. And the third was an orientation of the members towards the common good of the unit and a willingness to comply with the social rules and order of the social unit. They also determined that there was an inherent gradient so that each of these characteristics could be exhibited to a greater or lesser extent (Scheifer & van der Noll, 2016, p. 592). Consequently,

they then defined social cohesion as "*a descriptive attribute of a collective, indicating the quality of collective togetherness*…characterized by close social relations, pronounced emotional connectedness to the social entity, and a strong orientation towards the common good" (Schiefer & van der Noll, 2016, p. 592, italics in original). For our purposes, we take a social psychologist lens and focus on within class and school dynamics as the collective entity and utilise the Scheifer and van der Noll (2016) definition as a framework. Thus, social cohesion means here, at a minimum, that the WPS educators and children displayed close social relations, a pronounced connectedness to each other and a commitment to the common good of each other, the class and the school. And as the children's deckchair dreams attest, to the wider world beyond.

This description provides a literature informed foundation but is lacking in some important semantic nuance. This leads to a brief consideration of the potential 'dark side' (Martins et al., 2017) of social cohesion. Martins et al. (2017), studying binge drinking in adolescents, suggest that the strong social relations of some social units can lead to harmful outcomes for the individuals, the social unit and broader society. This could be manifest as less than generous qualities such as parochialism as noted by Halsey (2011) above. Equally, Scheifer and van der Noll (2016) warn that some conceptions of social cohesion are founded on coercion and or demands for homogeneity and conformity. Consequently, to use the concept for our purposes, it needs to semantically embrace the idea that the social unit is built on the "constructive coexistence of individuals who differ in their values" (Scheifer & van der Noll, 2016, p. 590). We therefore affix the adverb 'constructive' to qualify the concept as 'constructive social cohesion'. This reduces the semantic ambiguity, so that while WPS members are strongly connected to the class and school as a social unit, this is constructively achieved through embracing and promoting the diversity of values and dispositions of community members and welcoming or embracing visitors with new ideas such as Sue. As such the Children's Council project fitted right in and built on and from this milieu.

Constructing and embracing a shared class topic

With all dreams shared, heard, filmed and compiled in note form in each child's Speaking and Listening folder, together we set out to agree on a class topic. The challenge was to reach a 'workable agreement' that was both 'plausible' and 'ethical'. The children were asked to persuasively present a topic proposal, taking into account all the dreams they'd heard. They could do this individually, in pairs or groups but the proposal needed to one with which others might agree*.

Focusing on the arrangement canon of rhetoric, the presentations were developed on a loose template that provided space for 'the idea'; elaboration through a justification; and elaboration through an example that would be persuasive for their audience. It also provided a space to develop a personal goal for delivery of their presentation. To help with this, as a class we created an acrostic mnemonic and discussed how mnemonics can aid memory.

Proposals were presented, and we practiced giving feedback through 2 stars and a wish format. We then trialled three democratic processes to make a decision. The results of the secret ballot and preferential voting (distributing three stickers each to preferred topics) were released simultaneously, compared and discussed. The children were then challenged, and

supported, to try to reach a consensus decision, or 'workable agreement' through deliberation that, taking into account the voting results, was fair to everyone*.

The children, Sophie and I sat in a circle and the person with the whiteboard marker microphone could speak. I later wrote in the school newsletter: "I was so inspired by the children during this deliberation. They listened to each other respectfully and put forward suggestions rather than negative comments. By the end, everyone was 'twinkling' (wriggling fingers to show they liked what they were hearing) after one child put forward the proposal *that all people live a happy life before they die of old age.*"

This became our class topic and thereafter we explored many different perspectives on being 'happy' and on what is 'old'. As part of presenting our explorations, we created a pedagogical documentation (Buldu, 2010) display to share our findings and ideas with parents. The display also enabled to me to explain what the children were learning. Creating the display was when the children appropriated the project and began to have active initiative and agency in its future direction.

**Ethical Capability Victorian Curriculum F-10 (2016): Discuss the role of personal values and dispositions in ethical decision-making and actions (VCECD008); and Discuss the role and significance of conscience and reasoning in ethical decision-making (VCECD013).*

We next explore several factors that might have contributed to the notably constructive social cohesion of the school, loosely utilising the notion that social cohesion is multidimensional, "consisting of phenomena on the micro (e.g., individual attitudes and orientations), meso (features of communities and groups), and macro (features of societal institutions) level" (Scheifer & van der Noll, 2016, p. 583).

"This is our chance to make the world a better place"

Gabbi: Well I had S, J and E in the car today and on the way home I just said "so tell me what you've been doing", because obviously I miss out because I'm not in the classroom at that stage, … and so they were explaining what was happening and I was just prompting them a little bit with "why are you doing that?" and they were really thoughtful in what they were saying: "this is our chance to make the world a better place" … It was really interesting, and I'd say well what do you think the next steps are now or what are your next steps and they could tell me what they were doing now but then what…what potentially could be the next step. So, and then they went off and had their own little conversation about "oh maybe we could do this" and "maybe we could do that".

Gabbi had taken three of the Grade 6 girls to a leadership meeting at a nearby primary school. As this recorded reflection was to take place later in the day, she took the opportunity to hear from the children whilst in the car. Within this micro scenario, various dimensions of the phenomena of social cohesion at this school were revealed. Firstly, the embracing personalities, encompassing mindsets, and leadership abilities of a group of students of which S, J and E are one half; secondly the leadership of the educators in cultivating constructive social cohesion and who effectively harness the third dimension, that is the possibilities and positivities of a small rural school as a learning environment.

Student Dimensions: "A Particularly Good Group of Grade 6's"

Sophie: I think we have a particularly good group of Grade 6's this year… I think everyone else looks to them for leadership and maybe that is why in those first few weeks we saw those grade 4's very quiet and being very quiet and less willing to be involved but as they've

> seen everybody else jump in they've realised that that's what's expected of them and that's what's accepted and that it's okay to do that.

S, J and E are three of an influential, mature and particularly thoughtful group of Grade Six girls. Individually, and as a cohort, these children were important contributors to the constructive social cohesion of this class and school as role models and agential leaders. On a meso level, numerically they were a significant group constituting six of the eight Grade Six children at the beginning of the year (J moved interstate mid-year), while there were around four-five Grade Five students and around six Grade Four children. On a micro level, all these girls' personal orientations toward strong investment in connective relationships and the common good of each other, the school and the world, were a striking characteristic. It is not so unusual that middle childhood girls, in comparison with boys, might be more engaged, say Capella, Kim, Neal, and Jackson (2013) who define engagement as involving daily interactions between students and their learning contexts and the ways and extent to which students are committed to or involved in school (p. 368). This is a definition strongly linked to our definition of constructive social cohesion. In this class however, because of the numerical dominance and seniority of this group, with several of the girls also demonstrating exceptional interpersonal and social skills, this group were a very influential factor in what was a notably egalitarian classroom. This is a classroom "in which many children are socially connected in friendship or "hanging out" ties to many other children in the classroom" (Capella et al., 2013, p. 368).

In order to demonstrate or quantify this group's contribution in some way, we utilise the advice of Seevers, Johnson, and Darnold (2015) who studied social networks and personality factors in classrooms and suggested that "instructors with fewer students", in contrast to researchers and educators with access to formal personality tests, might "intuitively estimate personality factors based on their first-hand interactions with students" (p. 202). Seevers et al. (2015) utilize what they call the big five personality factors of extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The last of these is a very embracing quality with one of the adjectival phrases they use to describe this quality being 'willingness to engage in new experiences'. Based on our experiences and observations we rated the personality of each child against each of these factors using a 5-point Likert scale where one was a high exhibition of the personality factor and 5 was a low exhibition. Thus, an extroverted, agreeable, reliable, even–tempered and keen to try new things student, would be allocated a one next to each criterion. While the estimation we offer here provides only an illustrative picture, five of the Grade 6 girls were rated one (very high exhibition) or two (high exhibition) against each personality factor. The sixth girl was much more introvert than extrovert but rated a 1–2 on other personality factors and was always a constructive (if a little reticent) group member and collaborator. This rough sketch of the Grade 6 girls' personality factors illustrates how they were able to be a very positive role model for younger students, individually and collectively. Overall class ratings against these personality factors were:

Openness to experience 84%

Agreeability: 79%

Conscientiousness: 74%

Extroversion: 63%

Neuroticism: 58%

The high level of 'openness to experience' in general, and the leadership of the Grade Six girls in particular, could help explain why the project and its expansive intentions and purposes were so readily embraced.

Going visiting

Going visiting is a teaching idea, or heuristic, I used that is linked to Arendt's phrase *to think with the enlarged mentality, you train your imagination to go visiting.* It is designed to encourage students to think and judge with an 'encompassing ethic'. This essentially is the ability and will of people to think about things from a range of perspectives – human, non-human, past, present and future and 'topically' using Aristotle's theory of invention and 'topics'.

Topics are a way to learn to think things from many different angles and an approach to thinking that I argue Arendt used herself (Plowright, 2013). For example, Aristotle's number seven topic suggests one way to 'invent' an argument is through 'defining your terms'. So as a class we explored many different people's definitions of both 'old age' and 'happiness'*. Thinking by exploring 'topics' can be creative and novel, generating new ideas and proposals by mixing and blending ideas in the imagination.

To scaffold this thinking, I created a sheet of links to video clips, blogs, and articles from a wide range of people all over the world talking about or exploring the idea of happiness or old age. Among other perspectives, these included a dance by a Chinese couple missing limbs; a TED talk by a young man with a terminal illness; and a discussion of happiness and morality by a professor. Sophie showed some of the videos as whole class events and discussions and in my sessions, children selected, investigated and presented ideas from the links via the display or in digital form. For example, a group of four boys created a power point presentation on different perspectives of happiness.

**Ethical Capability Victorian Curriculum F-10 (2016): Examine the contested meaning of concepts including truth and happiness and the extent to which these concepts are and should be valued (VCECU009).*

The personal qualities of these children however, wouldn't be so agential and influential in a school environment that did not make space for them to flourish. Thus, we turn to explore educational leadership and its role in cultivating an embracing and constructive social cohesion in this instance.

Leadership and Small Rural School Dimensions: Embracing and Cultivating Renewal

Looking simultaneously through micro, meso and macro lenses of social cohesion, Gabbi's use of the word 'home' above to signify the school, and the familial proximity between the children and their teacher/principal in her car (a semi-regular

occurrence), reveals several qualities of educators and learning environments in small rural schools. Kalaoja and Pietarinen (2009), studying small rural schools in Finland, found that teachers and pupils experienced a "home-like atmosphere and informal personal-relationships" (p. 111), and that teachers are particularly dedicated considering their work a calling (p. 113). Similarly, in Australia, Halsey (2011) found that because each student is known both individually and as members of a group by teachers and principals, these schools can have "a relentless focus on the learning needs and achievements of their students" (p. 7). The car trip is just one example of the educators' dedication and also demonstrates the opportunities available to teaching/principals to actively listen to the children and engage in family-like interactive dialogues. At least in this instance "there seems to be justification in the claim that the small rural school environment is quite unique in being a platform for multiple learning and instruction processes" (Kaloaja & Pietarinen, 2009, p. 112).

Small rural schools are a global phenomenon so WPS is phenomenologically, globally connected with such schools (see for example Domingo Peñafiel & Boix Tomàs, 2015; Zao & Parolin, 2011). Whilst they may be individually small, as a global cohort these schools are numerically significant (Clarke & Stevens, 2008) and a "great proportion of the world's children" attend rural school in developing countries and in the 'Western world' (Smit, Hyry-Beihammer, & Raggl, 2015, p. 97). In Victoria, Australia, Wildy and Clarke (nd) found that approximately 25% of government schools cater for less than 100 students and have a teaching principal. Kalaoja and Piertarienen (2009) describe a very similar situation in Finland where around 20% of each age group studies at a primary school in sparsely populated areas with less than 100 pupils. Thus, what happens in them matters and warrants "close attention" (Wildy & Clarke, nd, p. 1). Smit et al. (2015), focusing on studies in four European countries, found there can be a perception that small rural schools are 'inferior' and argue this is a reason to pursue research in rural schools. Similarly, Wildy and Clarke argue the need to "fully understand factors, mechanisms and processes related to the success or failure of individual small rural schools" because "from a social justice perspective the performance and vitality of these schools as well as the communities they serve are a crucial consideration" (nd, p. 2).

At this juncture then, as the social unit of WPS demonstrates the 'successful' capacity to embrace new learning projects and processes for the children (and educators), we briefly explore the educational leadership that is required to achieve and sustain this state of being. Arendt theorised that action was required in order to avoid the "internal decay" of political communities (Arendt, 1958, p. 199). She focused on civilizations, city-states, nation states and any 'space of appearance' (Arendt, 1958) where people come together over matters of shared interest, like in our case, the education of children in a small rural school. Based on actual examples rather that normative reasoning, Arendt (1958) found that when people engage in deliberation to build, what we might call 'constructive social cohesion', they can become a power full community. In contemporary parlance, Arendt's idea of power equates with 'people power', which is the momentum generated by deliberative decision-making between a group of people who bring their decisions into fruition, and thus also their existence as a community or unit.

This power however, only exists through continual cultivation of deliberation, decision-making and action-taking that is consistent with the decisions made—if any of these actions fail to occur, the power and the community dissipate through failure to renew. Thus, it is that even "mighty empires and great cultures can decline and pass away without external catastrophes" (Arendt, 1958, p. 199), because when the members fail to tend to these demanding but renewing activities, the community atrophies and withers. Or it might self-implode through squabbles, in fighting and competitive self-interest overriding commitment to the common good of the unit whether it be a civilization or small rural school. Leaders who want to lead ethically power full social units, need to tend to and actively cultivate emergence of new ideas and actions through shared deliberation, decision-making and action-taking.

Arendt argues that by virtue of birth we all have the potential capacity to inject new ideas into the world that might transform it in some way. This capacity she calls 'natality' (Arendt, 1958, p. 247). Natality is a kind of second birth when a person injects an idea into the world that is acted on, renewing the world in some way. However, ethical natality depends on the will and capability of a speaker to form generous propositions for actions and speak persuasively; **and** the capacity of plural others to generously listen, understand, judge fairly and embrace some of the new ideas and be 'willing to give them a try'. Thus, the speech/action skills and capabilities of both proposing persuasive, and embracing ethical and plausible, new ideas and give them a try, is essential to and a characteristic of, the ongoing well-being, survival and 'thrival' (a neologism) of a constructively cohesive social unit. Thus, if constructive social cohesion simultaneously provides a supportive space for agential coexistence where new ideas are encouraged, **and** requires embracing and cultivating renewal, constructive social cohesion becomes not only a desirable state of being, but an essential condition for educational leaders and educators to foster in their classroom and school as social unit.

On the scale of civilizations and humanity, education, says Arendt, is crucial because it is:

> the point at which we decide whether we love the world enough to assume responsibility for it and by the same token save it from that ruin which, except for renewal, except for the coming of the new and young, would be inevitable (Arendt, 1961, p. 196).

If we take this wisdom as a guiding principle, a, or the, purpose of education becomes to foster in the young their own capacity for renewal of the world when it is their turn to be decision-making and action-taking adults. On this basis, learning skills, abilities and knowledge that might contribute to ethical renewal of the world in the future becomes a moral imperative for educators to enact if they value sustainability of their community and wider human and non-human systems, up to and including Earth. Arendt (1961) was strident in her counsel however about not instructing the young about what the world should be, for she says it is our job as citizen-adults to take renewing actions in the here and now and allow the young the space to renew the world in their own way when their time comes as adults (Arendt,

1961). And in welcoming and embracing the Children's Council project which led to the children proposing and establishing their own Children's Council with some generous ideas for their local and global community, Gabbi and Sophie's educational leadership at WPS wisely created a yearlong occasion in which things to fell together in a trusting and safe way for the children to practice and develop their capacity for ethical natality. In so doing they cultivated the constructive social cohesion of the school through embracing renewal and modeled this mindset to the next generation.

Conclusion: The Big Event

An 'encompassing ethic' (Plowright, 2016) is a generous capacity of judging, with ethically transformative intent and potential. It is the will and capability to locate the standpoints of others, human and non-human, past present and future, to generate proposals for decision-making that encompass the widest possible range of perspectives. This ethic avoids ideological, habitual and ad hoc opinions, instead facilitating reasoned, thoughtful suggestions and arguments. In a world where freedom of speech has become, in some minds, an unfettered freedom to offer ill-informed opinion and alternative facts, we could be in what Henri Giroux calls a 'time of tyranny'. He says therefore "it is crucial for us to address this question head on: What is the role of public and higher education, especially in a time of tyranny?" (Giroux, 2017, "The Vital Role").

The Children's Council project as it enactively 'fell together' through interactions between the children, Sue as a visiting researcher/teacher, Sophie as a class teacher and Gabbi as the teaching principal, addressed this question head on. It sought to simultaneously marry large existential questions of times of tyranny, with the particulars of a small rural school setting on the coastal edge of South Gippsland, and local curricula frameworks of Speaking and Listening mode and Ethical Capabilities. It explored an inventive approach to developing curriculum with the children and for the children to 'enlarge their mentality' by visiting other perspectives. As educator partners, we showed that it can all be done, and the children showed an enormous capacity and willingness to embrace a new pedagogical approach and practice the capabilities required for ethical natality.

Sue's plan for a big event turned into the children's plan for 'the' big event as it has become known, where a federal politician, the local Mayor, community leaders, family and children from another school, gathered as an audience of at least 60 in this little school and were thrilled by the children's oral presentation skills and their generous future orientated and embracing ideas not only for themselves, but humanity, all life and the planet itself. This little school certainly has a big heart and made front page news in our local paper (see Fig. 3.1).


The MIRROR
Reflecting Upon Local News in South Gippsland
LITTLE SCHOOL, BIG HEART
I LOVE
PH: 5682 2377

Fig. 3.1 The Children's Council project at WPS 'Big Event' made front-page news in the local paper

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Chapter 4
Transforming Hopes and Visions for 'At-Risk' Primary Students in East Gippsland: A Community–School Partnership

Nicola F. Johnson

Abstract Previously conducted research about 'at-risk' students has focused on the transition from primary to secondary schools or on the transition between secondary and tertiary sectors. Students who are deemed to be at risk are those who are disengaging from school via non-attendance and whose chance of non-completion is high. Much research has documented how formal education fails disengaged youth. As a Federation University Gippsland Education (FUGuE) researcher, this chapter documents the various intervention strategies used to address at-risk *primary* school students through completing 31 exploratory, individual interviews with stakeholders involved in a pilot programme within a network of 8 schools located in remote East Gippsland. This chapter points to the particularities of how this place shapes the ways remote communities operate—partly due to its geographical and resource limitations but also due to the creative solutions the stakeholders employed. The aim of the research was to deepen understandings of what is currently known and practiced in a cluster of primary schools regarding at-risk students, complementing the existing work of secondary educators and community agencies. Findings indicate that children as young as 5 years old can be identified as at-risk, and that interventions with disengaged secondary school students are often not early enough, as some children are in danger of not completing primary school. This innovative programme set about to cater for at-risk primary students in a unified manner, in the form of shared cultural practices amongst school and agency staff in a demonstrated commitment to the United Nations' sustainable goal of equitable educational opportunities for all. Their shared commitment to collaboration and relationality was identified, alongside a focus on the overall well-being, hope and vision of families within the community.

Due to a number of significant developments, I commenced at Edith Cowan University on the other side of Australia in October 2018. This has been a sad time as I have had to cut the deeply embedded roots, I had made in Gippsland in my commitment to the people who encapsulate it. This chapter was written while I was at Gippsland.

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Introduction

This chapter is included in Part I of the book *Educational researchers and the regional university,* which focuses on regional university researchers and transformative educational partnerships and highlights the purposefully built partnerships within the East Gippsland Schools Network, the local community agencies and how school culture contributes to transformative work. Due to its geographical remoteness, limited educational and occupational opportunities and the general lack of community specialists, East Gippsland communities are innovative in addressing community-based issues. This chapter resonates with Chap. 6 (entitled, 'Broadening Horizons': Raising youth aspirations through a Gippsland school/industry/university partnership) in highlighting the how the place of East Gippsland shapes its community's aspirations, performance and achievement. The remoteness and isolation of this particular local government area means that stakeholders have to come together to work out solutions for themselves. Hence, the focus on relationships within schools and the communities is foregrounded in this chapter. These relationships go beyond categories, hierarchies, structures and labels such as 'at-risk'. Instead, the focus is squarely on the child and the child's success.

Previously conducted research about at-risk students has focused on the transition between primary, secondary and tertiary sectors (see Lamb, Jackson, Walstab, & Huo, 2015; Tay & Lim, 2010; Waters, Lester, & Cross, 2014). Being referred to as at-risk traditionally includes disengagement from education as well as non-completion. The research presented in this chapter documented various intervention strategies used to address at-risk primary school students through completing 31 individual interviews with stakeholders involved in a pilot programme located in the regional area of East Gippsland, Victoria, Australia. East Gippsland, one of the 6 local government areas (LGAs) in Gippsland covers an area of 20,931 km^2 (8082 mi^2) of the eastern corner of the state of Victoria, Australia (refer Chap. 1). It is located approximately 400 kilometres east of Melbourne (equal to about a 5–6 h drive) and has a low-density population (0.02 persons per hectare) of approximately 43,000 people (East Gippsland Shire Community Profile, 2016). The Australian Bureau of Statistics (2016) classifies East Gippsland as 'remote' (compared to the other Gippsland LGAs) and illustrates it as one of the most disadvantaged socio-economic municipalities in the state.

The research was commissioned by the Schools Focused Youth Service (SFYS) in association with Gippsland Lakes Community Health (GLCH). GLCH provides a range of services including but not limited to immunisation, counselling, alcohol and drug services, emergency assistance, homelessness and housing support, disability services, maternal and child health, and child protection. The SFYS's brief (State of Victoria DEECD, 2013) is to focus on young people aged 10–18 years who have been identified as at-risk and require early or targeted intervention to

facilitate re-engagement and connection with schooling. A partnership between primary schools in this particular LGA and community agencies deploys prevention or intervention strategies for at-risk young people. As presented in Fig. 4.1, the diagram shows the percentage of intervention types, which informs the work of the SFYS across the state of Victoria.

The East Gippsland Schools Network (EGSN) has a different model of student services provision to most Victorian government school networks, which relies on a Student Support Services model funded by the Department of Education and Training (DET), Victoria. In order to overcome the key factor of isolation, the East Gippsland model maximises flexible delivery options by funding schools on a per-service basis from accredited providers such as psychologists and specialist therapists.

This chapter presents the findings from an investigation into an at-risk pilot programme trialled by the SFYS East Gippsland network. Specifically, the research investigated the work undertaken by a group of schools in the EGSN to address the needs of at-risk primary school students and was not an evaluation of the programme. Specifically, the programme focused on increasing the knowledge of early interventions in primary schools that attempt to build connectedness and completion rates, increasing the knowledge of considerations needed when working with students at-risk, and examining intervention strategies and innovations used by pilot schools. The research questions were:

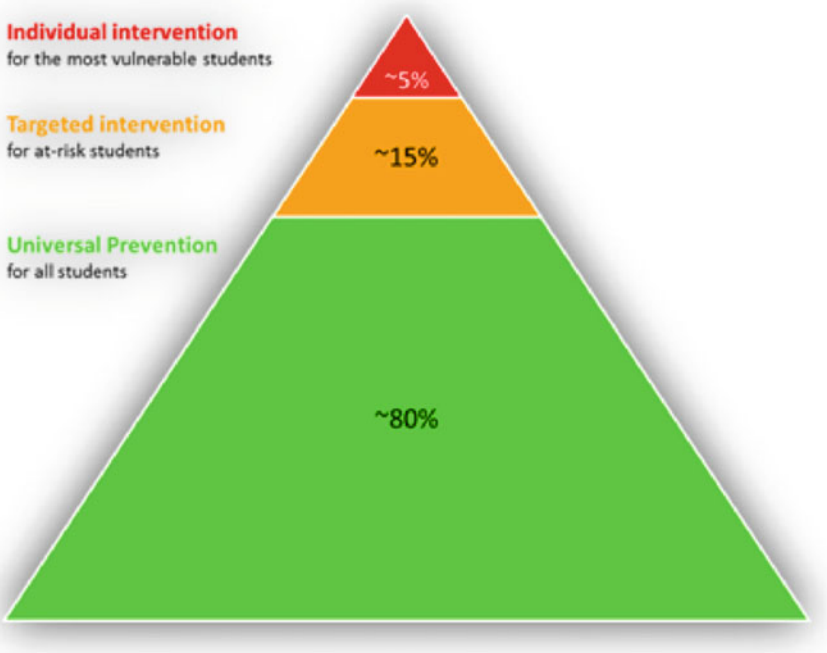

Fig. 4.1 Types of intervention. *Source* State of Victoria DEECD (2013, p. 4)

1. What are the un/successful intervention strategies and innovations used in the early intervention at-risk pilot programme for primary students in East Gippsland?
2. What considerations need to be made when working with at-risk primary students?

In mid-2015, the newly appointed facilitator of the SFYS in East Gippsland contacted Federation University's School of Education (Gippsland campus) to ascertain availability and interest in conducting research into the at-risk pilot programme for primary students. Fellow FUGuE academic Margaret Plunkett and I set off to Bairnsdale to 'breathe the same air', as the SFYS facilitator so aptly put it, and seek further information about the project. As we had the capacity to complete the necessary research in a short timeframe, what eventuated was new engagement with the East Gippsland region, responding to the need (and request) for educational research. In alignment with Corbett's (2015) provocation, and as an educational researcher in this project, I was 'forced' to make connections between schools, communities and the various components that comprise 'regionality'.

The chapter is structured with a review of literature that points to why this study was needed. I then explicate the methodological approaches used in the research, before presenting the findings and discussion section, which paints the particulars of the East Gippsland Schools Network, including what they did for at-risk students, and how their commitment to the success of each child was a marker of school culture.

Regional Students At-Risk

The following literature review explores current research literature in the field of at-risk students within regional areas. It highlights seminal work within Australian and international settings and identifies the gap in the research literature the project specifically addressed.

Extensive work has been done on identifiers for students at-risk and approaches that support their connections to *secondary* schooling in Australia (e.g. Crockett, 2012; Gale et al., 2009; Lamb & Rice, 2008). Many studies have explored the challenges surrounding the transition from primary to secondary schools (Carmen, Waycott, & Smith, 2011; Riglin, Frederickson, Shelton, & Rice, 2013; Waters et al., 2014), or from secondary schooling to university education (Gale et al., 2009; Sellar et al., 2009). From an Australian-based study that focused on the transition of primary students to secondary school, Waters et al. (2014) stated, 'Future interventions to support young people's transition should begin in primary school and build positive peer relationships while empowering parents to support their adolescent through the transition' (p. 543). Similarly, other research has focused on why some students are early school leavers (Hattam & Smyth, 2003; McGraw, 2011), including the challenges facing education within regional, rural and remote areas of Australia (Corbett, 2016; Halsey, 2017). Further to this, Schwab (2012) specifically focused

on Year 9 Indigenous students deemed at-risk. Other work has focused on infants, toddlers and pre-schoolers who were seen to present with challenging behaviours (Armstrong, Ogg, Sundman-Wheat, & St. John Walsh, 2014).

Building on this literature, other research has focused on particular programmes or particular areas of intervention such as mental health (Armstrong & Boothroyd, 2008; Fazel, Hoagwood, Stephan, & Ford, 2014) or substance abuse prevention (Schroeder & Johnson, 2009). A notable amount of work has also been completed on positive behaviour support (Benner, Nelson, Sanders, & Ralston, 2012; Lane et al., 2009; Luiselli, Putnam, Handler, & Feinberg, 2005; Sugai & Horner, 2009), where a school-wide model of positive behaviour support as a programme is advocated. Downes and Roberts (2018) point to the difficulties of staffing rural schools in Australia, including the challenges of high turnover, isolation, as well as the particular needs of rural education. Other research has focused on the associations between activity type and developmental outcomes among rural youth (Ferris, Oosterhoff, & Metzger, 2013) or city-centric orientations to educational opportunities (Halsey, 2017) that may limit pathways and aspirations within rural settings (Corbett, 2016; Halsey, 2018). Tay and Lim (2008, 2010) have researched other considerations such as after-school computer programmes in primary schools for at-risk students. While there appears to be significant research about numeracy and literacy interventions for primary students, there is limited research investigating how at-risk primary students are identified or catered for within the primary school itself, especially in regional settings.

The work of Stephen Lamb (e.g. Davies, Lamb, & Doecke, 2011; Lamb & Rice, 2008; Lamb et al., 2015) has focused on disengagement from school and work across the spectrum from young children through to adults. Lamb et al. (2015) found that those living in rural and remote communities are less successful academically than students in urban areas. A comprehensive report that focused on disengaged adult learners aged 15–64 (Davies et al., 2011), highlighted factors that lead to disengagement and offered effective approaches to re-engagement. Further to this, the report also discussed funding models and costs of interventions. Of particular relevance to this chapter is Lamb's finding that 28% of working-age Victorians located in East Gippsland were unemployed or not in the labour market and without Year 12 or equivalent qualifications. Lamb (2015) also claimed that the Australian education system failed one in four people. The report entitled, *Educational opportunity in Australia 2015: Who succeeds and who misses out* (Lamb et al., 2015) illustrated the gaps in educational opportunity across four milestones from the early years to young adulthood. The four milestones were as follows:

- For the early years, the milestone is the proportion of children who, at the point of entry to school, are developmentally ready as measured across five domains: physical health and well-being, social competence, emotional maturity, language and cognitive skills, and communication and general knowledge.
- For the middle years, it is the proportion of Year 7 students who meet or exceed international proficiency standards in academic skills.

- For the senior years, it is the proportion of young people who have completed school and attained a Year 12 certificate or equivalent [high-school diploma in the US].
- For early adulthood, it is the percentage of 24-year olds who are fully engaged in education, training or work (p. 2).

Halsey's review (2018) into regional, rural and remote (RRR) education within Australia aligns with the 'quality education' sustainable goal of the United Nations (2015), which aims to 'ensure inclusive and equitable education and promote lifelong learning opportunities for all' (Goal 4). Halsey stated the key challenge in RRR education is ensuring all children have access to high-quality education regardless of where they live.

Lamb et al.'s (2015) research suggests there remains a strong and persistent link between a young person's socio-economic status and educational outcomes. With regard to educational attainment, those living in rural and remote communities do worse than students in urban areas. Around one-quarter of young people do not complete secondary schooling or an equivalent. In addition, Halsey (2018) found a decreasing trend of aspirations, academic achievement and associated qualifications with increasing remoteness within Australia. He highlighted the inequalities and disadvantage surrounding educational opportunities in very remote areas due to distance, lack of public transport along with being able to access necessary health and social services. Globally, these overarching realities faced by regional communities have direct resonance with the United Nations' (2015) sustainable development goal of 'reducing inequality within and among countries' (Goal 10).

When a high risk of low achievement is identified, there are many programmes, policies, additional funding or strategies available that might be employed to address such needs. However, the research completed within this project pinpoints the importance of the teacher–student relationship and the connection to the social and emotional needs of the child (Cefai & Cavioni, 2014). The importance of relationships and focus on children's needs have been clearly identified by other Australian researchers in previous work who have focused on secondary education (e.g. Hattam & Smyth, 2003; McGraw, 2011). Elsewhere, it has been identified that personalised learning and focus on individual students accelerates student success (Childress & Benson, 2014).

In addition to identifying the limited research conducted on primary students deemed at-risk, this chapter also addresses an area that remains relatively undocumented, namely how a cluster of regional primary schools focus on developing quality relationships that support the needs of children as a way of addressing the increasing numbers of students deemed at-risk.

What Does It Mean to be at Risk in East Gippsland?

Within this place of economic disadvantage, remote location, and typically low secondary school completions, it would be easy to define at-risk as the lack of engagement at secondary school and the low completion rates of secondary school. As stated in Chap. 6 (in this volume), the low aspirations and visions for the future result from these factors, but also perpetuate the cycle for future generations. What became evident during this research is that the at-risk reference encompasses primary school students who are not only in danger of schooling non-completion but who are also disengaging with the primary school through their non-attendance.

The other significant contribution of this chapter is its engagement with the broader literature surrounding the notion of the individual child. What this research illustrates is that individual children can move in and between being at-risk at different stages of their early schooling and during a school term (9–10 weeks). In keeping with the SFYS types of intervention (see Fig. 4.1 in this chapter), the way this cluster of schools went about addressing those who were potentially at-risk or who were at-risk was the application of a philosophy that focused on the individual child that enabled their success every day. This form of 'universal prevention' (State of Victoria, 2013) meant that every child was afforded the same opportunities and given high-quality care and education.

Conducting the Research of the Programme

Primarily, the main method of data collection was semi-structured interviews. The choice of qualitative semi-structured interviews was deemed appropriate given the purpose of the research, and the exploratory nature of the pilot programme. The research did not seek to quantify or generalise the findings in the research, rather it focused on identifying key themes that emerged from the qualitative data collected.

Seven primary schools and one secondary school were involved in the programme. Each school was provided with funds from the programme over 6 months from June to December 2015. The Schools Focused Youth Service (SFYS) also provided professional development to each school. The schools were encouraged to trial a range of strategies to identify students at-risk and approaches that support their connections to schooling (see below for some identified strategies). Programme participants deemed the participation of the secondary school important. They suggested substantial work occurs in successfully transitioning students successfully from primary to secondary: unsuccessful transitions can lead to disengagement and disconnection from schooling, thus increasing the likelihood of at-risk students.

In conducting the research in late 2015, ethics approval was first obtained from the Victorian Department of Education and Training (2015_002846) and Federation University's Human Research Ethics Committee (A15-130). The researcher (author) visited each of the seven schools and took photographs of particular posters that were

Table 4.1 Participants

	Principal	Assistant principal	Teacher with well-being coordination responsibilities	Teacher	School counsellor	Agency workers
Number interviewed ($n = 31$)	6	4	3	10	2	6

representative of school culture (such as school values, or particular programmes).[1] The researcher was also provided with a tour of each school. The six interviews with workers from various agencies were conducted in the offices of Gippsland Lakes Community Health (GLCH) in the town of Bairnsdale. In total, 31 semi-structured individual interviews were conducted with adults, 6 with those employed in East Gippsland agencies and 25 employed in schools. The school participants included members of the school leadership team, leading teachers, teachers, school counsellors and those responsible for the well-being programmes. School participants were asked; how students at-risk were supported, what approaches were employed to support students, and which key programmes were provided for students. Table 4.1 identifies the roles the 31 interview participants had within the schools or agencies, including the number in each category. Years of experience and the gender of the school participants are not mentioned in order to provide confidentiality.

Of the six agency workers interviewed, three were male and three were female. They are coded and referred to as M1, M2, M3 and F1, F2 and F3. Agency workers were asked about the strengths of their agency, how they worked with schools, what they could do better, and what they viewed as being the greatest obstacles in meeting the needs of students at-risk.

Findings: What Do We Do for At-Risk Students?

A traditional definition of at-risk is those who are disengaging from school via non-attendance, and whose chance of non-completion is high (see the literature review section). For most of the participants in this study, the concept of at-risk itself was more nuanced and less specific. For example, there seemed to be different levels of children being at-risk, however, the general consensus of the interviewees was that all students would be at-risk at some stage of their life. Below is an interview excerpt from a teacher who explained their perceptions of how children can move in and out of being at-risk:

[1]The eighth school was part of the Catholic Diocese and due to the short timeframe, ethical permission to conduct the research was not sought from the Diocese.

> …there needs to be accepted belief within staff that all of these at-risk kids can learn … but also this understanding that you can go from being at-risk to not at-risk, and then you can go back to being at-risk, and then you can be not at-risk, and then go to at-risk for a month, and so for that month you might need some care and some help and some guidance more than you needed before (Teacher with wellbeing responsibilities).

Comments such as these emphasise the contextual and subjective nature of labelling students at-risk, along with the fluidity of movement between and in and out of such a category, by that I mean, being at risk at certain times during the year, or being at risk sometimes, rather than being considered always at risk.

Schools identified particular strategies employed to meet the needs of those who were currently deemed at-risk students. They included:

- Mentoring programmes (one to one with an adult), such as 'special friends'.
- Breakfast clubs.
- Emergency lunch provision.
- Lunchtime activities and events.
- Programmes that emphasise particular philosophies such as the school-wide Positive Behaviour Support or William Glasser's Choice Theory.
- Enrichment or extension programmes, either within curriculum areas or through the provision of extracurricular activities, such as Drum Beat, and Secret Agent Society.
- Annual year level events.
- Transition programmes between primary and secondary schools.
- The creation of hubs or home groups for year levels.
- Individual learning plans.
- Professional development provided around trauma or poverty, for example.
- Employment of specialist and support staff.

While these strategies were identifiable, it was more difficult to clearly identify and describe the ways that teachers, principals and agency workers developed relationships with students and families in order to meet the social and emotional needs of the child and connect them to the school.

The findings presented in this section focus on three themes evident from the content analysis of the data: relationships with students, school culture, and relationships between schools and agencies, which are now discussed respectively.

Relationships with Students

Inherent in the participants' discourse was the belief that all children can learn. Furthermore, there was a shared belief that children must have their physical, social and emotional needs addressed before learning can take place. Instead of primarily focusing only on learning and teaching, the foremost focus was on addressing the

emotional, social and physical needs of the child are addressed, building and maintaining a relationship between teacher and student. This foundation must be provided in order for students to have a chance of learning. For example, Principal 1 stated:

> We keep expecting, supporting, driving people's understanding as to why kids are behaving like that or what needs kids have of affection, love, water, food, sleep—you can't teach literacy on its own.

Consider this statement in contrast to the teacher who focuses on preparing students for tests or focuses on literacy and numeracy yet does not focus on the child and his/her relationship with them. Across the schools' network and evident in the culture of each of the schools was an explicit focus on what was best for the child, which included the student's interests and needs. Participants overwhelmingly reported that how their schools dealt with at-risk students was how they catered for all of their students. 'Putting the child first' and variations of this phrase were provided by many respondents. They worked on providing the best care they could for their students, which exceeded merely focusing on academic learning, as highlighted by another Principal:

> Well, students at-risk is as much about teaching and learning the whole person in terms of the links. If you're a very good teacher and we use our model we have to be empathetic to students' needs; that we have to know the student; that we have to know our content and we have to actually have pedagogical strategies and we actually have to pick the right strategy at the right time and we're customising our approach and we have to be reflective about our practice. If we follow that model that model is going to serve well students at-risk and serve well kids that aren't at-risk (Principal 3).

Inherent within many of the interviewees' responses was the importance of establishing high-quality relationships between staff and all students, as illustrated by the following examples:

> Nearly all of our major professional development as a whole school has made that a central theme—building relationships is massively important, not just to kids at-risk (Principal 3).

> So, relationships are made key to staff, that it's not only best practice for students at-risk, but it's best practice for all students, that the door's not going to be open to learning if you don't have the relationship with the kids. So how we foster and make that clear to staff is through, I suppose, induction, when staff come. It's part of their induction that the first thing you've got to do when you're coming into our school is you've got to look to foster relationships with all the kids, and that's going to allow you to be the most effective teacher that you can be (Teacher with wellbeing responsibilities).

A whole school focus on building relationships appeared to belong to wider shared beliefs and values that informed practice, and therefore was a fundamental component of school culture.

School Culture

Much of the work around school culture was dependent on the Principal of the school. He or she, with the assistance of the leadership team, drove and emphasised beliefs,

values and programmes that shaped school culture. Inherent to school culture were the quality of relationships between staff, staff and students, staff and parents and staff and agencies.

> … staff understand that they're not just academic teachers; they're actually teaching the whole child and part of that is to care and build a relationship so that the teaching can take place but it's teaching about behaviour as much as about socialising. We don't want teachers spewing out content. We want them actually to tailor the content according to the needs of the student and that's going to be different for every student in the class (Principal 3).

Essential to school culture in most of the pilot programme schools was a focus on the child, which one assistant principal describes as 'kids come first'. These aspects comprised much of the school ethos and culture. For example, once school values had been identified regarding beliefs about supporting students, the unpacking of them and what it means in practice and what that 'looks like' was essential to reiterate and reinforce, so that staff not only 'talked the talk' but also 'walked the talk'. The importance of leadership in this regard was highlighted by one of the principals:

> … with weak leadership, values don't permeate down through the staff in an even way where you actually improve practice and use consistency of practice (Principal 3).

Professional development (such as what was listed above) was provided to staff so that shared beliefs and values could flow down from the 'leaders' to the 'doers'.

> We're working on a shift or a change now, changing a philosophy where it just doesn't rest with key leaders to solve the problems of the at-risk, it really comes down to probably the leader driving where the direction should go, but he or she not being the lone person in that conversation, it needs to have a team of people including if there's aid involved, and most importantly the classroom teachers, who are teaching the child (Teacher with wellbeing responsibilities).

The eight regional schools in this programme were clearly focused on attending to the needs of the whole child, and rather than emphasising particular programmes or interventions, much work was being done to create meaningful and positive relationships and events to increase students' chances of engagement and success. By creating a school culture in which children wish to be engaged, their social, emotional, physical connections were made, and increased and subsequently, academic achievements were enabled.

Relationships with Agencies and Schools

Participants acknowledged that more work needed to be done in order to strengthen the relationship between particular agencies and schools, and to develop a shared understanding around the limitations and constraints and strengths that each can provide. Representatives from schools commented on the improved relationships with agencies but were also aware of the high turnover of staff in some agencies, which meant the relationships developed with particular people in certain agencies were lost. This meant schools were unclear about who they might phone next in that

person's absence. School interviewees also acknowledged the funding and resourcing limitations of agencies. From these comments, it appeared more work could be done to develop further understanding of the parameters and requirements that shape the work of agencies. One agency worker provided insight into the complex nature of her work:

> I think we all, we need to understand it from an educational framework, but schools need to understand it from a social and emotional framework as well. Because I think what we've tended to do with challenging issues is, that's the way governments fund things … if someone's homeless we fund for homelessness, if someone's got family violence we fund for family violence, someone's having an education in a school, we fund for education. My beliefs are that people don't operate like that … you know if you're struggling with homelessness or you're struggling with family violence you've probably got a whole heap of other things going on as well … and that's going to impact on your housing, it's going to impact on how you are at school (Social worker F1).

Obstacles to the work of agencies with schools included time, money, lack of public transport, some access to specialist health services due to the remote location and the sheer geographical size of East Gippsland. From the perspective of the agency workers, the location and isolation of East Gippsland meant there were specific, additional challenges that children, young people and families in the region were required to negotiate. These challenges included the difficulty of accessing particular services, as well as the lack of quality public transport in order to travel to service providers (counselling, specialist doctors, etc.). One agency worker believed the community needed more support for rural children and young people due to the historical complexity and limitations of being positioned in a rural area (issues of funding will be revisited later in this chapter). In general, the work of agencies was viewed positively by the schools who acknowledged the improvements made in communication, and their willingness to help and support children wherever possible. Given their challenging work conditions, high caseloads and limited resourcing, the positive acknowledgement of the agencies work is significant, as exemplified in the following interview excerpt:

> In this world that I live in in welfare all I'm dealing with is kids with high complex issues and there's a whole lot of trauma that they're carrying around with them. It's refreshing sometimes to go for a walk through the school and see those kids that are functioning quite highly and know that there are actually kids out there who are doing really well. So, the world I live here in Gippy Lakes [GLCH] we get a few success stories but every client who comes through the front door has got some significant issues going on (Social worker M1).

Also evident from the interviews with the agency workers was the recognition that strong connections and effective communication needed to occur between schools and agencies.

Discussion—Success Every Day

What was prevalent throughout the schools was not so much a focus on providing programmes that would be considered 'targeted intervention', but rather catering for students' needs through 'universal prevention'. Programmes were inclusive of all students, and not just available to those at-risk. Teachers and principals creatively designed strategies to build students' connections to the school, and developed and maintained trust, respect and care within the teacher–student relationship. In contrast to other previously completed research, the qualitatively significant finding was that the ways these schools catered for particular at-risk students was how *all* students were catered for. The interview excerpt below is a reminder of the commitment evident to **each** child in this particular regional setting:

> So, we've got to understand the kids and their needs rather than do what people might think. So, when kids come to your school we have to make sure we're ready for that kid. And the kids that are in the school we've got to make sure that we're ready for them and catering for them. Like a young person on our staff years ago said … make sure that the kids have success every day. So, if they don't have success Monday we've got to make sure they have success Tuesday. If they hadn't had it Tuesday, make sure you have been talking to other people to get ideas as to how they can have success Wednesday, and then if they haven't had success Wednesday, well we've all got to get involved to make sure they have it Thursday (Principal 1).

Based on the interviews, it appears that in East Gippsland the factors that contribute to the 15% of students deemed at-risk (State of Victoria, DEECD, 2013) are exacerbated due to low socio-economic status, generational poverty, low literacy levels, language background, location, low parental educational levels, poor school attendance, and Indigenous status. From listening to the SFYS facilitator, the agency workers, and some of the principals involved in the research, ongoing issues within a child's family are both complex and historical. All of this suggests that the proportion of students at-risk in East Gippsland might be higher than 15%.

Funding to support primary schools should be provided in a way that assists them to work with agencies and families to promote holistic care from the foundation years (prep) in consultation with early childhood providers. Continuing to fund programmes that focus solely on 10–18-year olds who are at-risk does not meet the demands for early intervention. Principals of primary schools were able to identify students at-risk or predict those to be at-risk in the first year of school. Two different interview excerpts illuminate this phenomenon:

> … what I'm hearing and what I've learnt is that schools could probably look at all of their grade 1's and pick out 3 or 4 kids that they know are going to struggle all the way through. That's what I hear when I talk to Principals (Social worker, M1).

> I can probably think of three or four prep children who are already of great concern to us (Principal 2).

An issue that consistently emerged across the data was the need to challenge the short-term, 'silo' funding, as children and families usually face many complex

issues that tend to be intergenerational. This kind of complexity cannot be simplified through receiving funding from one category or be addressed in a short-term project.

There remains a need to deepen the understanding and cooperation between those involved in agencies and those involved in schools. Better communication between sectors such as the following is needed: maternal and child health care nurse, kindergarten teachers, child care providers, primary and secondary principals and teachers and other agencies. Each field is constrained by their own restrictions and limitations such as hours of work, reporting and privacy obligations, funding and time available. Therefore, a question of pertinence to the stakeholders in this research is, 'How do we holistically manage a child's case where the school shares their expertise on the child's education, and where the agencies involved with the child and his/her family are not funded or operated in silos?' By working towards a holistic model that builds on the strengths that both agencies and schools provide, greater understanding and collaboration might be obtained.

During the research, I noticed the strong independence of the EGSN group—made necessary because of their remoteness, their lack of access to specialist services, and because they were not tied to the Student Support Services model provided to other school networks. In many cases for the school principals, this enabled autonomy and a licence for further creativity. The shared commitment to values and school culture materialised post-research in the form of a Memorandum of Understanding between agencies and the EGSN. As a FUGuE researcher within my local region, my work had highlighted and strengthened the network and the SFYS project—an innovative project resulting from the unique circumstances of remote Australia. It is evident that the EGSN group and the SFYS facilitator reached out to their local regional university to identify and validate their particular endeavours. Their proactivity speaks to the benefit of having a regional university with whom they could collaborate. It also highlights how a research collaboration between the regional university and the community enabled an emergent opportunity to investigate and showcase how remote communities sustain themselves and become resilient.

The research identified funding limitations related to constraints surrounding age, disability or other types of category, which meant that because a child did not meet the requirements for a certain category, then very little support was available for that child. Funding restrictions were also evident where different portfolios could provide support based on whether clients met the criteria and did not effectively fund for the multiple problems that might be evident in a young person's life or with their family. Another limitation was the short-term funding which did not recognise the extent of dealing with certain problems that cannot be 'fixed' in 6 months, for example. Therefore, the author suggests that further research be conducted to explore what a holistic model of funding might look like, where there is greater communication between units within an agency, between agencies, and between schools, especially in regional areas. Future work should build and promote a shared understanding of best practice surrounding the care and education of regional students at-risk.

Concluding Comments

Although providing professional development in regional schools brings unique challenges (Barrett, Cowen, Toma, & Troske, 2015), fundamental to the success of professional development is the role of the school leadership team in supporting this change in beliefs about how students are supported. At the grass roots level, it is the teachers who need to adopt and focus on changes that involve enacting school beliefs and values.

The work of the EGSN in listing their priorities as 'child first' and emphasising the teacher–student relationship is a signifier of commitment to quality learning and teaching. It is important that funding constraints around particular age groups (and categories eligible for funding) are challenged. If it is evident that younger students at the primary school are in danger of non-completion of primary school (let alone secondary school), then funding to address these needs and provide early intervention is necessary. Furthermore, the definition of early intervention needs to be challenged in order to encompass a younger demographic. As children are increasingly being identified at-risk at younger ages, the way resourcing and funding is provided needs to be re-thought. The findings from this research indicate that children as young as 5 years old can be placed at-risk, and that intervention with disengaged secondary school students are often not early enough.

It appears the schools in this programme focused on the child: building relationships and enacting a school culture that included them, and which enabled them to have a meaningful connection with the school. The school employees focused on establishing caring relationships that supported, included and engaged students. In consideration of whether at-risk programmes are needed for primary students, the answer lies not in the programme or programmes or employed strategies, but in the school's culture, communication and relationships established with students, their families and with community agencies.

A key concept often introduced early to pre-service teachers within teacher education programmes is that of Maslow's hierarchy of needs (Maslow, 1943). The premise emphasised to these future teachers is that we cannot teach math to the student who is hungry or suffering from trauma, or who feels unwanted. Increasingly within educational discourses is the focus on performance, for example improving testing scores to signify excellence, but also to be competitive in world rankings. For me as the researcher, the focus of the school network was on each child, his/her well-being and their inclusion in school culture. Effective support of each individual was first and foremost. While individual teachers may be known for their holistic approach, and/or their quality relationships with children, I could clearly identify a shared commitment within the pilot schools whereby the child, their health and well-being was paramount to any neo-liberal discourses surrounding performance. The premise of the participants in this cluster of schools were focusing on and increasing student well-being. If well-being was good, then learning was enabled. The established relationships between schools, families and agencies, essentially

developed as a consequence of the economic and social particularities of East Gippsland, were key to students' lives and potential to flourish within this place.

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Chapter 5
An Invited Outsider or an Enriched Insider? Challenging Contextual Knowledge as a Critical Friend Researcher

Anna Fletcher

Abstract Researchers conducting studies in communities have long taken an interest in exploring the different merits of positioning themselves as "insiders", "outsiders", or "in-betweeners" in relation to their participants. Yet research exploring the role of the researcher as a "critical friend"—a supportive yet challenging facilitator in self-evaluation processes—has not been fully examined. This chapter speaks to the FUGuE element of *transformation*—which in the present context, I define as a process where structures and forms undergo conversion. The chapter provides my account as a FUGuE researcher of exploring the methodological implications of my research with a small group of teachers at a primary school located in the Latrobe Valley in Central Gippsland. The emergent relationship now informs my teaching and research practices. The discussion draws on a recently commenced longitudinal study exploring teachers' use of strategies and processes aimed at improving literacy practices—a phenomenon known as capacity building—through collaboration in a professional learning team, within a context of school improvement. Due to a prior connection with the school, I was invited to become a critical friend and active participant as the school initiated a new Professional Learning Team (PLT) in literacy. Informed by recorded conversations from the PLT meetings, my aim was to conceptualize the role and transformative implications of researching as an invited critical friend within a professional community. This chapter contributes to the methodological discourse of educational research by offering a contextualized analysis of the tensions among the notions of trust, credibility, and positionality as a critical friend researcher.

Keywords Critical friendship · Professional learning · Insider–outsider · Researcher identity · Trust · Transformation · Social Cognitive Theory

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Introduction

This chapter provides an exploration into my role as a researcher and the methodological implications of my work with a small professional community of teachers at a primary school in Latrobe Valley, which I was invited to join as a critical friend. It is informed by the notion that research within a particular community is influenced by the life experiences, values, and personal biographies of the participants and the researcher, and in particular by researchers' interpretations of their experiences (Banks, 1998; Dwyer & Buckle, 2009). As such, while positioned among the *regional university researchers and the research-teaching nexus* in this book, this chapter also speaks to Part 2 of the book, by framing the discussion around as a self-reflexive narrative of a regional researcher.

In line with this book's focus on regional transformation, this chapter provides a vignette of practice which aligns with what some scholars in the field of regional development (e.g., Trippl, Sinozic, & Lawton Smith, 2015) refer to as "the third mission"—a mission beyond teaching and research, whereby universities adopt an "engaged role" in regional development by integrating with innovation and governance networks through social, cultural, and societal activities. As a FUGuE academic collaborating with a local learning community as a critical friend, I see my role as a form of contribution relating to social and civic roles within a community, thereby enacting what Trippl et al. (2015) refer to as the "engaged university" model. In addition, researching and collaborating with a professional learning community as a critical friend is arguably a modest form of a regional innovation system (Trippl et al., 2015), whereby a university contributes to regional economic development. In this case, the contribution toward economic development relates to the growth of human capital through generating knowledge (Barca, McCann, & Rodríguez-Pose, 2012; Gülümser, Baycan-Levent, & Nijkamp, 2010). As a collaborative project, both the school's professional learning community as well as the FUGuE group benefit from the knowledge development.

The notion of this project being part of a regional innovation system, is supported by an examination of the policy debate of place-neutral versus place-based economic development (Barca et al., 2012), which highlights the significance of the complex relationship among factors such as human capital, innovation, institutions, and economic geography relating to distance. The place-based approaches, which Barca et al. (2012) are proponents of, assume that the social, cultural, and institutional characteristics of a place matter. In addition, place-based approaches attribute significance of place-based knowledge in policy intervention, since it leads to clarity of "who knows what to do where and when." Barca et al. (2012, with reference to numerous other scholars) posit that the economic activity of a region increasingly is regarded as being determined by "the specific institutional arrangements and constructs of any space" (p. 136). Adopting a clear place-based stance, they put forward an interesting link to globalization, arguing that it has made space and place more important since capital, goods, people, and ideas travel more easily.

In light of the significance of space and place on regional development, it is important to clarify the spatial context and the particulars which frame the present chapter. Guided by the Australian Bureau of Statistics' (ABS, 2016) terminology and the Australian Statistical Geography Standards (ASGS) for sections of state structures, "region" is understood here are as a geographic area or boundary which can be classified into five categories[1] of remoteness, categorized according to their relative access to services. The particular region the present vignette is located in—is classified by the ABS (2016) as an *Urban Center* (consisting of between 200 and 10,000 "usual residents"), surrounded by a *rural balance area* (with less than 200 "usual residents") in *Inner-Regional* Victoria.

As noted previously in the book and by other FUGuE researchers, beginnings are mysterious (Plowright et al., 2016 with reference to Arendt, 1978). However, the beginnings of the study which underpins the present chapter can be traced back to an informal chat at a community forum (in line with the "engaged university" model, see Trippl et al., 2015) for local principals which were hosted at the university's Gippsland campus a few years ago. As a new academic in the area and hopeful of developing research collaborations with local schools, I was proactive in following up the initial conversation with a particular principal who appeared to welcome the idea of collaborating. This led to an invitation to attend a *cluster* meeting, a formal partnership between seven local schools who collaborate with the aim of transforming and continuously improving learning for students (Department of Education and Training, 2015). Again, I described my area of research interest and expressed my willingness to work with local schools. While no specific project emerged from the initial meeting with the principals of the local cluster group, they expressed a wish for me to attend the future cluster meetings, which generally occur once per school term. A year or so later, at a cluster meeting prior to the summer break, the principal of Wattleforest Primary (a pseudonym) was particularly excited after having completed a Bastow Institute[2] course about developing a school culture of high performance. Keen to continue the work and further develop the knowledge the school staff had gained through the course; the principal (who will be referred to as Miriam in this chapter) had been advised by Bastow to seek out a critical friend with insights into educational research. Miriam promptly invited me to collaborate with the teachers as part of Wattleforest Primary's Literacy Professional Learning Team, which was about to commence its work on creating a high-performance culture with a focus on students' literacy.

From the onset, it was decided that my role as a critical friend in the project would be to facilitate the team's professional conversations, for example by asking questions to challenge and scrutinize existing assumptions or suggesting readings from the research literature on literacy. Additionally, I was to provide guidance to

[1] Major Cities of Australia; Inner Regional Australia; Outer Regional Australia; Remote Australia; Very Remote Australia.

[2] The Bastow Institute of Educational Leadership is a branch within the Regional Services Group at the Victorian Department of Education and Training. The institute offers professional development in transformative leadership for Victorian primary, secondary, and early childhood education professionals.

the school when analyzing data gathered in the project, particularly with respect to linking the analysis to theoretical frameworks and existing research.

The study is collaborative in nature, framed around exploring teachers' *capacity building* (Crisp, Swerissen, & Duckett, 2000), a term which refers to developing and using strategies and processes aimed at improving literacy practices within a professional learning team in literacy (PLTL). In particular, the study aims to explore any reciprocity between the shared PLTL activities; what individual teachers do to inform and shape their practice to develop a high-performance culture relating to student literacy, and the reasons for their choices; and student perceptions of what high performance in literacy entails for themselves as learners.

In accordance with the Australian National Statement on Ethical Conduct in Human Research, approval to conduct the study was granted by Federation University's Human Research Ethics Committee. In order to accurately capture the discussion in the PLTL meetings, I was granted permission by all participants to audio record the meetings. The participants were assured in writing that they were free to withdraw from the study at any time, without prejudice. Care has been taken to ensure that some teacher pseudonyms are gender neutral to ensure that the participants remain anonymous. Before discussing the emerging findings and exploring the methodological implications of the study, this chapter will present a theoretical framework of researcher positionality.

Insiders, Outsiders and "In-betweeners"

Researchers conducting studies in communities have long taken an interest in exploring the different merits of positioning themselves as "insiders", "outsiders", or "in-betweeners" in relation to their participants. Broadly speaking, the term "insider" relates to the researcher who shares the unique values, perspectives, behaviors, beliefs, life experience, and knowledge as the members of the community they research (Banks, 1998; Brann-Barrett, 2014; Breen, 2007; Dwyer & Buckle, 2009). By contrast, an "outsider" does not have these elements in common with the research participants. Researchers with an insider status within the domain they explore have the benefit of a refined understanding of the group's culture, and the ability to interact naturally with the group and its members. Furthermore, they are able to draw on a previously established relational intimacy with the group (Breen, 2007; Bonner & Tolhurst, 2002). However—as Breen (2007) notes—there is a flipside to the inherent advantages that insider researchers enjoy. For example, the level of familiarity between the insider researcher and the participants may lead to erroneous assumptions based on the researcher's prior knowledge and/or experience (Breen, 2007; DeLyser, 2001; Gerrish, 1997; Hewitt-Taylor, 2002). As Corbin Dwyer and Buckle (2009) point out from a qualitative methodological perspective, a researcher's membership in the group or area being studied is a particularly pertinent consideration due to the direct and intimate role the researcher plays in both data collection and analysis.

Some literature suggests that the perceived level of connection with a particular geographic location is a common factor, which largely determines whether researchers conceptualize their research identity as insiders or outsiders within the community they study (e.g., DeLyser, 2001; Kerstetter, 2012). The notion of a researcher's connection to particular locales is pertinent to this book with its explicit focus on research in Gippsland. However, at first, I viewed the geographic location of the project as incidental. My focus was on the professional community, not the location of this community. However, the significance of the project's place-based framing dawned on me as I became more familiar with regional development literature (Barca et al., 2012; Gülümser et al., 2010; Trippl et al., 2015).

In-betweeners

The binary conceptualization of researchers as insiders or outsiders of the community they research is frequently rejected by qualitative researchers due to being perceived as too rigid and ineffective in capturing the nuanced and fluctuating nature of human relationships. For instance, Breen (2007) describes herself as an "in-between" researcher on a continuum that ranges from being a "complete participant/member researcher" to researching as a "complete observer". As an in-between researcher, studying grief experiences following fatal vehicle crashes in Western Australia, Breen describes how her research was prompted by the sudden loss of her partner's sibling, which resulted in her immersing herself into the research domain. Breen (2007) highlights that as an immersed "in the middle" researcher, "I was *not* an outsider, I benefitted from the assumption that I was independent, unbiased, and objective, all of which remain important currency within mainstream psychology" (p. 171, my emphasis). Similarly, Dwyer and Buckle (2009) and Brann-Barrett (2014) are proponents of the notion of the "in-between" space that allows researchers to position themselves within the community they research as *both* insider and outsider rather than insider *or* outsider.

As stated earlier, this chapter highlights the FUGuE notion of transformation as a process in which structures and forms undergo conversion. In the context of the present study, as a FUGuE researcher invited to join the professional learning community at Wattleforest Primary School, the transformative notion of occupying a space as an "in-between" researcher is helpful by providing a broad, yet nuanced understanding of my researcher position. However, when reflecting on my role as a researcher, I question whether the conceptualization of an insider/outsider continuum is sufficient. In particular, I wonder how an insider/outsider continuum accommodates the transformative elements of building relationships and the conversion from outsider to insider (and vice versa). In addition, I sense that another dimension needs to be included: the influence people exert over their own functioning and the course of events that result from their actions, a concept defined here as *agency* (Bandura, 2006, 2012). In the present context of exploring the methodological considerations connected to researcher identity, the notion of agency in respect to taking the

initiative to conduct research appears to be a pertinent issue. The conceptualizations of an insider/outsider identity as researcher discussed above, seemingly adopt the assumption that the researcher demonstrates agency by initiating a study.

Critical Friendship

An alternative perspective when examining agency that drives research is to conceptualize the community as an active agent who initiates research. To explore this alternative perspective, the notion of critical friendship is helpful. The term "critical friend" refers to a flexible form of assistance from an external agent who acts as a supportive yet challenging facilitator in school development processes (e.g., Costa & Kallick, 1993; Swaffield & MacBeath, 2005). In relation to researcher positionality, the critical friend is commonly defined in the literature as a detached outsider who offers alternative perspectives to an individual or a group of people with whom they are working (e.g., Swaffield, 2008). The critical friendship is characterized by trust, provocative questioning to enhance reflection and the challenging of assumptions through the provision of helpful critique of participants' practice and viewpoints (Costa & Kallick, 1993; Swaffield, 2008). Critical friendship can also be employed as part of the collaborative professional inquiry that involves pairing colleagues from the same setting as critical friends for each other. This form of critical friendship presents a blend of insider and outsider stances in which the critical friends are insiders who adopt the role of outsiders to generate fresh perspectives. In contrast to "in-between" researchers such as Breen (2007) who describes herself as *neither* an insider or outsider, this form of critical friendship aligns with Dwyer and Buckle (2009) and Brann-Barrett (2014) who describe themselves as *both* insiders and outsiders. While this fused insider/outsider approach to critical friendship entails the friend critiquing, challenging, and presenting alternative viewpoints to their colleague, the process is frequently observed by a third party, a researcher who observes the process as an outsider (see studies by James, Black, McCormick, Pedder, & Wiliam, 2006; Wright & Adam, 2015).

The two different forms of critical friendship discussed above offer nuance and depth to researchers who seek to examine their researcher identity in relation to the community they engage with. However, these approaches are underpinned by the assumption that the insider is the agent who seeks input from an outsider, a catalyst who facilitates and generates new perspectives that offer new insights for the insider.

Conversely, a small number of studies illustrate a more insider-focused conceptualization of critical friendship, where researchers have adopted the dual role of being a researcher as well as a professional learning partner (Hedges, 2010; Wennergren, 2016). Groundwater-Smith and Mockler (2009, p. 98) describe the notion of a critical friendship model whereby the critical friend with their "well-developed skills in research as well as expertise in the focus area for research" provides particular support in the *process* of inquiry for school-based teams.

To this end, Hedges (2010) provides a pertinent account of her enactment as a critical friend researcher in the context of a professional learning community of Early Childhood educators in Auckland, New Zealand. Describing how her study was "responsive to calls to support teacher development through participation, dialogue, and intellectual engagement" (Hedges, 2010, p. 302), the research design provided access for the teacher participants to research-based information and inquiry opportunities as they engaged in evidence-informed inquiry about their practice. In particular, Hedges sought to "explore the role of the researcher in increasing coherence between research, practice and professional learning" (p. 302). Similarly, in Wennergren's (2016) Swedish study of teachers' collaborative learning, she describes her role as an academic facilitator who "initiated processes of change and provided tools and structures for teacher learning and critical friendship based on research literature" (p. 265). The study explored the evolvement of critical friendships within a professional learning community, with particular regard to factors that characterize different phases of the development process. In the context of the present book on regional collaborative education research, the context of Wennergren's study is particularly noteworthy because it was conducted as a cooperative partnership between two schools and a regional university, Halmstad, in Sweden.

The various conceptualizations of critical friendship research described above, all suggest that the process is transformative in the sense that practice and its framing structures and forms undergo conversion. However, as a FUGuE researcher who was invited to join a professional learning community as a critical friend, I find myself conscious of seeking to transform my membership status within this group from being an invited outsider to becoming accepted as an insider, who can offer alternative views and shared insights.

Critical Friendship Research from a Social Cognitive Perspective

Through a social cognitive theoretical perspective (Bandura, 1986), this transformative process is to a significant degree shaped by the reciprocal, but fluctuating, relationship between the researcher's interest, motivation, values, experiences, cognition, and self-efficacy which all constitute *intrapersonal influences*; the *social influences* the community presents and the *behaviors and actions* which frame interaction between the researcher and the participants.

In seeking to establish myself as a trusted critical friend of the setting I was invited to collaborate with, there is a clearly reciprocal dynamic between my behavior and actions, the community of teachers and intrapersonal dimensions which relate to me. Having worked for many years as a primary school teacher in a number of different school settings, I have insider access to some of the social and cultural capital that is applicable to the setting I work with. This knowledge has shaped my behavior and language as I have sought to become established in the setting. Before

the research formally commenced, I attended the two student-free days at the school at the beginning of the school year. During these days, I participated in planning meetings and collaborated in workshops for staff to familiarize themselves with how to conduct the new running records procedures the school was introducing. Similar to other researchers who have sought to develop a position as insiders in a new setting by volunteering to do "chores" (see Breen 2007 with references to DeLyser, 2001; Gerrish, 1997), I found myself volunteering to pack up projector equipment and moving tables back into position after meetings. Consciously letting the teachers know that I used to be a classroom teacher, I asked questions about how to mark pauses in running records, explaining that I was "*a bit rusty, since I haven't done them for a few years*".

My deliberate attempts to "blend in" as a fellow (if former) teacher appeared to reciprocate well with the setting. By the end of the second planning day, Chris, one of the teachers, asked if I would be happy for my name to put on the Birthday list in the staffroom, "since you are going to be around for quite a bit."

A Typology of Critical Friend Researcher Identities

The notion of transformation, a process in which structures and forms undergo conversion, is an important concept which underpins the conceptualization of researcher position in this chapter. In this regard, Banks' (1998) typology of cross-cultural research provides a helpful nuance of insider and outsider research identities, particularly by highlighting the transformative nature of critical friend researchers' membership status in relation to the communities they study. Banks distinguishes between four types of researchers: (1) *the indigenous-insider*; (2) *the indigenous-outsider*; (3) *the external-insider*, and (4) *the external-outsider*. These are elaborated below.

In Banks' (1998) framework of researcher identity and positionality in relation to a community, the common reference points relate to *values, perspectives, behaviors, beliefs*, and *knowledge*. However, for the purposes of this study, I have adapted Banks' cross-cultural framework to incorporate features of effective learning communities (Coates, 2017; Woods & Macfarlane, 2017) in which common points of reference relate to shared *vision, values, culture,* and *ethos* (see Table 5.1: Typology of critical friend research within a professional community setting). The term "vision" refers to common ideals and goals the community aspires to achieve. "Values" refer to the community's standards of behavior and beliefs about what is important. "Culture and Ethos" is understood here as the spirit of the community, the climate which is manifested in its shared customs, rituals, symbols, stories, and language (Woods & Macfarlane, 2017).

Table 5.1 Typology of critical friend research within a professional community setting (adapted from Banks, 1998)

Type of researcher	The transformative element of critical friendship	Description
Embedded practitioner researcher (Indigenous-insider†)	Critical friendship is shared within the community. The critical friendship seeks to transform the existing community structures and processes from the known and accepted to the scrutinized and challenged	The critical friend may be a reflective practitioner, who is known and trusted by colleagues within the setting. The critical friend researcher shares and can speak with authority about the vision, values, culture, and ethos of the setting. The critical friend researcher enjoys a high level of trust from participants and has an advanced level of understanding of the context but may struggle to "step outside the situation" which facilitates theorization
Expatriate researcher (Indigenous-outsider†)	Critical friendship is imposed. The community perception of the researcher is transformed from being known and trusted as a community member to becoming detached	The critical friend researcher was socialized within the professional community but having acquired substantial knowledge, skills, and experiences from an outside community, the community perceives that the researcher does not share its vision, values, culture, and ethos
Enriched insider as a critical friend	Critical friendship is proposed (Swaffield & MacBeath, 2005) and developed between the community and the critical friend researcher, who has undergone transformation by acquiring knowledge skills and experiences from outside the community. The critical friend presents contrasting and enriched perspectives to develop practice, structures, and processes within the community from the known and accepted to the scrutinized and challenged	The critical friend researcher was socialized within the professional community but having acquired substantial knowledge, skills, and experiences from an outside community (e.g., undertaken a higher degree research), the researcher supports the community by presenting enriched, contrasting perspectives to the setting's vision, values, culture, and ethos The critical friend has developed a high level of trust from the participants and has an advanced level of understanding of the context. The critical friend draws on their external knowledge, skills, and experiences to "step outside the situation", and facilitate theorization

(continued)

Table 5.1 (continued)

Type of researcher	The transformative element of critical friendship	Description
Outsider invited as a critical friend (External-insider†)	Critical friendship is proposed/invited (Swaffield & MacBeath, 2005) and developed between the invited critical friend who assimilates into the community. The critical friend presents contrasting and enriched perspectives to help the community transform practice, structures and processes, shifting perceptions from the known and accepted to the scrutinized and challenged	The critical friend researcher was socialized within a different community, in which they have acquired substantial knowledge, skills, and experiences, which supports the community. The critical friend adopts the setting's vision, values, culture, and ethos. Like the enriched insider, the critical friend researcher draws on their external knowledge, skills, and experiences to "step outside the situation", and facilitate theorization
Detached observer (External-outsider†)	Critical friendship is imposed (Swaffield & MacBeath, 2005). The researcher originates from a different professional community, which the community perceives as foreign. Structures and processes may be transformed as a result	The researcher was not socialized within the community they research. The researcher is equipped with substantial knowledge, skills, and experiences from an outside community and represents contrasting perspectives to the setting's vision, values, culture, and ethos

†Term used by Banks (1998)

The Embedded Practitioner Researcher

This first form of a critical friend researcher shares the community's points of reference and is perceived by the community as a legitimate community member who can speak with authority about it. While Banks (1998) uses the term Indigenous-insider, the term Embedded Practitioner Researcher appears more applicable in a professional community context. "Embedded" is understood there to refer to the quality of being deeply ingrained or fixed in place. The critical friend researcher may be a long-standing member of staff who has a firm understanding of the vision, values, culture, and ethos of the setting. While the embedded practitioner researcher enjoys the advantages of a high level of trust from participants and an advanced level of understanding of the context, the researcher may struggle to "step outside the situation", which facilitates theorization (Burton & Bartlett, 2005).

The Expatriate Researcher

By contrast, the expatriate researcher (or *indigenous-outsider* in Banks' terms) was socialized within the community and therefore initially shared its points of reference. However, researchers in this group have experienced high levels of assimilation into an outsider culture and are, therefore, regarded by the community as outsiders (Banks, 1998). The community perception of the researcher is thus transformed from being known and trusted as a community member to becoming a detached outsider who does not share its vision, values, culture, and ethos. Consequently, the underpinning principles of trust may be lacking in the relationship and critical friendship may be perceived as imposed (Swaffield & MacBeath, 2005).

From a social cognitive perspective, this presents an intriguing illustration of the fluctuating reciprocality between intrapersonal and social influences. In the context of conducting research as a critical friend at Wattleforest Primary, I am arguably an expatriate researcher, in the sense that years of practicing as a primary school teacher initially socialized me as a member of a teaching community. Yet, having completed a Doctoral degree by research, I have to a high degree become culturally assimilated into what some teachers may perceive as the outsider culture of academia and theories. Given that critical friendship inherently seeks to transform practice by challenging participants' perspectives of its points of commonality—in this case, its vision, values, culture, and ethos—it is probably helpful for the critical friend to present a degree of attachment and outsider knowledge. This identifies the need to expand the typology to accommodate a form of critical friendship research that accommodates outsider perspectives that are perceived by the community as *enriching*, rather than an *imposing* form of critical friendship.

Enriched Insider as a Critical Friend

The concept of a researcher's identity and an enriched insider who acts as a critical friend presented in this chapter is an addition to Banks' typology (1998). It is a supplement made in the spirit of FUGuE, which from the onset has sought to present "disruptive transformations" and alternative ways of imagining relational research presences and intentions (Plowright et al., 2016). Furthermore, this conceptualization of researcher status derives from the research question which prompted FUGuE in the first place: "How do our individual stories of educational research in a regional university, reimagined and articulated as an assemblage, shape and inform our sense of purpose, impact and identity as transformative educational researchers?"

The enriched insider as a critical friend is conceptualized as a proposed form of critical friendship (Swaffield & MacBeath, 2005) in which research and collaboration develop as part of the emerging relationship between the professional community and the critical friend researcher. The friendship is underpinned by social cognitive factors which relate to the researcher. The notion of the "enriched insider" refers to

the researcher having initially been socialized within the professional community but then acquiring substantial knowledge, skills, and experiences from an outside community (e.g., by undertaking higher degree research). Thus, the critical friend is equipped with the ability to present contrasting and enriched perspectives that serve to develop practice, structures, and processes within the community from the known and accepted to the scrutinized and challenged. The critical friend has developed a high level of trust from the participants and has an advanced level of understanding of the community's vision, values, culture, and ethos. The critical friend draws on their external knowledge, skills, and experiences to "step outside the situation" and facilitate theorization.

Outsider Invited as a Critical Friend

An alternative way to conceptualize critical friendship research is presented when a professional community invites an outsider to join it as a researcher. In Banks' (1998) typology, this relates to the notion of a researcher as an *external-insider,* which refers to a researcher who was socialized within another culture but who has adopted the points of reference of the community and who is therefore viewed by the community as an adopted community member.

In the context of a professional community setting, this infers a proposed and developing form of critical friendship between the invited critical friend who assimilates into the community. As the term implies, the critical friend researcher is an outsider, who was socialized within a different community where they have acquired substantial knowledge, skills, and experience. In being invited and assimilating to the professional community, the critical friend researcher brings contrasting and enriched perspectives to develop practice, structures, and processes within the community from the known and accepted to the scrutinized and challenged. In line with Banks' idea of the external-insider, the critical friend adopts the setting's vision, values, culture, and ethos. Like the enriched insider, the critical friend researcher draws on their external knowledge, skills, and experiences to "step outside the situation" and facilitate theorization.

When reflecting upon my personal role as an invited critical friend of the PLTS at Wattleforest Primary, this conceptualization of critical friendship simultaneously challenges and resonates with my position as a researcher. From the onset, my role has been to facilitate further development of a shared vision, by asking questions and engaging in the community's professional conversations. Yet, I am invested in this professional community, I share its values, culture, and spirit. However, my role—and how I stand to contribute as an external-insider/invited critical friend—is to present the learning community participants with alternative perspectives that are informed by my academic, "outside" influences.

To this end, a conversation between two teachers, Chris and Jessie from Wattleforest, illustrates how this form of critical friend research manifests itself. Chris and Jessie approached me to discuss a "Reading, Teaching, and Learning Survey" which

they had asked their colleagues to complete at a PLTL meeting. Their initial intention, as articulated by Jessie at the meeting, was "to receive valuable information from teaching staff in regard to their attitudes, confidence, and capacity in teaching reading" (Jessie, PLTL meeting 10 May 2017) by simply collating the survey answers. From my perspective as a mixed-methods researcher, I suggested that a basic statistical test of the survey responses ($n = 10$) may help us identify patterns of association between the survey item responses. While Chris and Jessie appeared to mostly be impressed by the speed at which SPSS can generate frequency data and bar graphs, they were nevertheless intrigued by the fact that the tests indicated that there was a pattern of association between four items: (1) teachers approach to teaching and assessment and reading; (2) the school's agreed tools for tracking students' progress in reading; (3) teachers perceived level of confidence in conducting guided reading; and (4) teachers use of research to guide their teaching of reading. As a result of our conversation, and the subsequent expansion of the analysis of the data collected in their survey, a meeting to plan follow on-professional learning activities for the PLTL was scheduled. Furthermore, when the teachers at Wattleforest completed a second survey, some 6 months after the initial survey, Chris took the initiative to ask if I could "use that special software" to analyze the second set of surveys.

While my questions to the community and suggestions of alternative viewpoints are part of my role as a critical friend with an external background, the act of questioning is an essential part of the Wattleforest Primary's ethos (Woods & Macfarlane, 2017). After all, this is a community which prides itself on having a meeting climate in which the members respectfully challenge each other's thinking, as part of the formal meeting protocols.

The Detached Observer

The last of the different forms of researcher identity discussed in this chapter, is the detached outsider. As articulated in this book, the commonality of the FUGuE group is that our research is characterized by reciprocity, community engagement, partnership, and relationality. Consequently, conducting research as a detached outsider, or an *external-outsider*, as Banks (1998) conceptualizes it, is not an easy fit within the FUGuE ethos. Nevertheless, researching as a detached observer encompasses a different form of critical friend research, which is why it has been included in this typology.

The concept of the detached observer refers to research that is conducted within a community setting, but where the researcher was socialized within a different community compared to one researched. Thus, the researcher is equipped with substantial knowledge, skills, and experiences from an outside community and represents contrasting perspectives to the setting's vision, values, culture, and ethos. Importantly, the researcher has only a partial understanding of the points of reference within the community they research. A natural consequence is that such researchers often misinterpret the behaviors within the community of study (Banks, 1998).

While critical friends who conduct research as detached observers clearly seek to avoid misinterpreting the behavior of the people they collaborate with, the notion of a critical friend as an external-outsider is not to be discounted. As Swaffield and MacBeath (2005) note, the term critical friend has frequently been used in school improvement and evaluation contexts to describe external agents such as inspectors, advisers, university consultants, or school governors. Questioning whether external-outsiders such as these are able to effectively support schools, Swaffield and MacBeath (2005, p. 240) make the astute point that "support is in the eye of the beholder" and different forms of critical friends—the invited, proposed or imposed—come with different "passports", with differing legitimacy, authority, and power.

A Vignette of Ethical and Methodological Considerations

Reflecting about the questions of support, legitimacy, authority, and power raise important ethical as well as methodological considerations for all researchers, but perhaps particularly so for researchers who adopt a research identity as a critical friend. In the context of my study at Wattleforest Primary which informs this chapter, I must acknowledge its origin. I was invited by Miriam the principal to become a critical friend whose knowledge, skills and experiences from academia would present contrasting perspectives which she hoped would add to the professional learning community's vision, values, culture, and ethos.

Nevertheless, it is perfectly possible that teachers at Wattleforest Primary perceived the critical friendship as an imposition. In fact, in the early days of my collaboration with the learning community, I was struck by a remark made by one of the teachers. The comment was made at a time before the study formally commenced, when I was participating in team meetings simply for the purpose of becoming familiar with the setting's ethos—the spirit of the community—manifested in its shared customs, rituals, symbols, stories, and language (Woods & Macfarlane, 2017). At Wattleforest Primary, the shared customs and rituals in team meetings is to follow a Professional Learning Team (PLT) observational protocol (Education Services Australia, 2014) in which a senior team member joins a small PLT for 20 min by quietly observing the team's meeting and writing feedback to the team on a particular focal point which the team has decided on in advance. The protocol aligns with the principles of critical friendship dialog, which Swaffield (2008) describes as "a very particular form of conversation involving the exchange of ideas and the search for shared meaning and common understanding" (p. 328). In the context of this particular PLT, the shared meaning and common understanding relate to a series of steps:

1. The team develops a focus for observation, e.g., focus may relate to PLT protocols such as the discussion of data, professional reading.
2. Review of student goals.
3. Once the team has agreed upon a focus, it is forwarded to the Miriam or Renee in the Senior Team.

4. The team nominates a team staff member to conduct the observation.
5. The nominated team observer should contact Miriam or Renee for clarification of the focus of observation.
6. The duration of each observation will be 20 min.
7. At the completion of the observation, the observer along with either Renee or Miriam will discuss the observation in terms of "what we saw and what we heard" relating to the focus.
8. One or two focus questions will be developed to discuss with each team.
9. The duration of feedback will be 30 min and will occur during PLT time.
10. As a result of feedback received, it is expected that each team develops a theory of action. "If……. then…".

The feedback notes are provided to the team after the meeting and serve as a prompt for the next PLT. At this particular meeting, which was conducted early in the term, about four teachers and I were present and discussing the professional reading for the meeting. When Miriam and Renee from the senior team joined the group, a sudden but noticeable shift occurred. The teachers' conversation changed from having been animated and at ease to becoming quite stilted. The voice of the person speaking at the time grew tense, and the skin on her neck developed blush marks. There was a noticeable shift in the climate of the meeting, which surprised me at the time. Once the 20 min had passed and the observer left the room, and the group collectively exhaled noticeably before returning to their relaxed but vigorous discussion about learning.

I must have looked surprised, or made some comment querying the sudden change, which prompted someone to remark: "Now we know that you are not part of the powers-to-be." This comment intrigued me and intrigues me still. On one hand, I recall interpreting it as a sign that I was perceived by this particular teacher as "trusted" and "an insider". On the other hand, it made me think that this teacher probably had previously thought of me as an outsider who had been imposed into the setting. The latter made me feel uneasy. Importantly, particularly relating to Banks' (1998) argument that researchers positioned as external-outsiders often misinterpret the behaviors within the community of study, the PLT members' reaction at this particular meeting was out of character. Again, as a FUGuE researcher whose collaboration with the teachers at Wattleforest Primary is ongoing, I am in a stronger position as a researcher to judge the representativeness of this particular incident. Given the many other PLT meetings I have since attended, I feel comfortable in acknowledging that it was an intriguing comment, but it does not warrant questioning the legitimacy and ethical implications of the critical friendship research design that frames the study.

In this context, being trusted as a critical friend researcher and being perceived by the professional community at Wattleforest as capable of providing legitimate suggestions and observations to support the community is essential for two reasons. First, it underpins the design and methodology of the study and relates directly to the aim and significance. Second, having the trust of the participants enables me as a researcher to collect rich and nuanced perspectives which provide trustworthy data.

Future Directions for Critical Friendship Researchers

This chapter has primarily explored the methodological underpinnings and implications of conducting critical friendship research in the hope of articulating a theoretical framework and typology to scholars, practitioners, and participants who engage in partnership research. As Banks (1998) argues, research has a significant role in describing the complex characteristics of communities and has the capacity to empower marginalized communities. As a FUGuE researcher, this means conceptualizing and presenting positive relationships between the university and its partnership communities in Gippsland. As stated earlier, I see the work of the FUGuE group as a manifestation of the "third mission" of an engaged university, which in addition to conducting teaching and research, contributes to regional economic and societal development (Trippl et al., 2015).

It is hoped that the critical friendship framework presented in this chapter may help underpin future research and help communicate to a wider, global audience how regional universities contribute to regional development. Survey data of educational outputs indicate that only three percent of Excellence in Research for Australia (ERA) Educational Outputs came from regional universities (Bobis et al., 2013). This paper seeks to make a case for the importance of communicating research from regional universities, as well as illustrating how place-based research stands to contribute to regional development. This is not a unique view, there is clear recognition among rural researchers that findings from research conducted in community settings need to be communicated to a wide audience, which includes academic and community audiences (Brann-Barrett, 2014; Kerstetter, 2012).

Concluding Comments: Seeing and Being Seen

In the spirit of FUGuE, the notion of becoming, seeing, and being seen by others (Plowright et al., 2016), the process of reflecting on my researcher identity as a critical friend has transformed how I view myself as a researcher. While my earlier research has been conducted as part of a setting where I have been embedded (Fletcher, 2016, 2017), I have previously conceptualized my research as being a hybrid form of practitioner research, in which the practice of my colleagues formed the basis of theorization. When viewed through the typology of critical friend research presented in this chapter, my previous research has been of an "enriched insider" nature, part of the doctoral studies I completed while working as a primary school teacher. In line with social cognitive theory (Bandura, 1986), these experiences have shaped me and are now part of the intrapersonal factors that contribute to framing my behavior as an academic. The premise of this chapter is a reflective query of my own practice: "an invited outsider or an enriched insider"? By adopting a "fugual" perspective (Plowright et al., 2016), in which plural, contrasting voices are included and act in concert to express a recurring theme—in this case the notion of critical friendship—I have come to the realization that contrary to my initial phrasing, I have developed from an enriched insider to an invited outsider who researches in a place-based FUGuE partnership.

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Chapter 6
'Broadening Horizons': Raising Youth Aspirations Through a Gippsland School/Industry/University Partnership

Margaret Plunkett and Michael Dyson

Abstract The International Labour Organization characterises being young in today's labour market as 'not easy'. In parts of Gippsland, a regional area of Victoria Australia, it is certainly not easy because youth unemployment reached 21.7% in 2016, the second highest in the state. Within this regional–global context, research into youth aspirations is often bounded by a deficit-focused framework with little emphasis on contextual positives. This chapter, however, reports on a 5-year project of an innovative regional school–industry partnership. 'Broadening Horizons' provides project-based workplace learning units where partners immerse students in 'real-world problems' such as road safety and public transport. The Gippsland regional office of the Department of Education sought a formal evaluation of the project from the local university, at the time Monash Gippsland, but in 2014, we became part of Federation University Australia. This chapter outlines findings from a mixed methodology evaluation of the project's pilot stage and points out a number of important factors. These include a broader understanding of youth career support, youth aspirations and education/industry partnerships in a regional context, and the importance of involving parents. One school, in particular, achieved very successful parental involvement, which had a major impact on the learning and engagement of the students involved. We conclude that projects like this help to illustrate the complexities associated with youth aspirations in a regional context and may help to challenge associated, unsubstantiated stereotypes.

Keywords School–industry partnerships · Youth aspirations · Mixed methodology · Youth career support

Introduction and Background

In its *Global Employment Trends for Youth in 2015* report, the International Labour Organization found that despite improvements following a worldwide crisis in 2009, 'it is still not easy to be young in today's labour market' (ILO, 2015, p. 1).

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In parts of Gippsland, a regional area of Victoria Australia, youth unemployment reached 21.7%, the second highest in the state, in 2016 (GELLEN, 2017). Within this regional–global context, research into youth aspirations is often bounded by a deficit-focused framework with little emphasis on contextual positives. This chapter, however, reports on an innovative 2013–2014 partnership project in Gippsland that aimed to develop a project-based workplace learning model that would broaden the horizons of local youth regarding future career possibilities. 'Broadening Horizons', as it became known, emerged in response to concerns raised by local industry in Gippsland about the preparedness of secondary school students for the experience of work and future employment. A project aim was to investigate ways of raising student aspirations through providing better information about possible employment pathways and career prospects within the region and beyond. An anticipated formal outcome was the development of a project-based workplace learning model, through school and industry partners collaborating to provide 'real-world problems' for students to solve. The Gippsland regional office of the Department of Education sought support for a formal evaluation of the project from the local university, which at the time was Monash Gippsland, but in 2014 became part of Federation University, Australia (FedUni). As such, we the authors of this chapter became involved in a partnership which provided insights and benefits beyond the evaluative component of the project (Plunkett & Dyson, 2015). Further insights resulted from the fruitful discussions and opportunities provided through the lead author's involvement in the FUGuE research collaboration which was formed at the Gippsland campus of FedUni, as highlighted at the end of this chapter.

Over the 5 years of operating, many changes occurred in terms of the implementation of the 'Broadening Horizons' programme; however, the broad aims remained fairly constant. This chapter will outline how the project was piloted in its 1 year of operation (2014) with seven secondary schools across Gippsland in a joint initiative between the Department of Education and Training (DET) and the Gippsland Regional Managers' Forum (RMF). The RMF consists of local government Chief Executive Officers (CEOs) and state government Regional Directors, who as a group had identified education as a focus area for their network to support. Each of the seven schools partnered with local industries to develop work-embedded curriculum to provide students with real-life skills and role models. The Beacon Foundation, which oversaw the initial project, is a non-profit organisation seeking to inspire and motivate students to either stay in school and increase their educational engagement and attainment or choose a positive pathway that enables successful transition to employment or further education or training. In 2017, a management change saw the project come under the auspices of Berry Street, another non-profit organisation dedicated to supporting children and youth to have a safe and nurtured life with hope for the future.

Regional Victoria and the Particulars of Gippsland

Regional Victoria is a large and diverse area made up of inner, outer and remote locales, which makes it difficult to generalise and even to locate research within a specific contextual boundary. This is particularly true of wider Gippsland, which extends from the eastern outskirts of Melbourne to the south-eastern tip of Victoria at the New South Wales border, and encompasses beaches, farmland, mountains and lakes. Although the Latrobe Valley (Latrobe City LGA) is considered to be the main urban area of Gippsland, aspects of remoteness can still be experienced within the small isolated pockets of farmland that are accompanied by small populations and even smaller schools (refer Chap. 1).

This particular geography creates challenges for locating literature that truly speaks to the Gippsland context. While international literature uses similar frameworks such as distance from major cities to describe rural and regional areas, the reality is that globalisation has not entirely solved the problem of making international comparisons of rurality and regionality more meaningful, despite being more accessible. For this reason, the Australian literature is particularly useful in providing a context of regionality. However, as each state and territory differ, there are some shared aspects that add to the overall global picture.

Nonetheless, research is sparse in relation to topics such as youth aspiration in regional Australia, despite acknowledgement of the differences that may exist between metropolitan and regional youth in this respect. This was evident in a project conducted in four townships in another large regional area (Hume) in Victoria, which identified a range of challenges and barriers in relation to identifying aspirations and destinations of regional youth (McDonald, Harrison, & Blaiklock, 2012). They argued that while it was interesting that student participants acknowledged the influence and support of their families and teachers in their decisions regarding their futures, they did not 'feel supported by their communities and a significant number did not see futures for themselves within their community' (McDonald et al., 2012, p. 11).

This research highlights the complexity surrounding regional communities, particularly in relation to stereotypical perceptions relating to youth aspirations and concomitant opportunities. Hart (2016) concurs that aspirations are complex, and this complexity leads to challenges because not all aspirations can be achieved, and choices often have to be made, particularly in regional contexts. Corbett (2016) also challenges stereotypical assumptions about the incidence of low aspirations in rural populations, suggesting that often it is a response to the type of career opportunities that are available rather than aspirations. This supports the view stated by McDonald et al. (2012), who argue that the problem is not with aspiration towards higher education but rather 'with conversion of this aspiration to active participation' (p. 11). Similarly, Corbett and Forsey (2017) maintain that often a lack of resources or capabilities, rather than aspirations, are at play in regional communities.

Another report by McClelland (2013), specifically examining research into educational aspirations in regional Victoria, outlined a number of recommendations to

try to help convert aspirations into practice, including four that particularly resonated with the remit for 'Broadening Horizons' as given below:

1. Refocusing interventions at the higher secondary and tertiary level thereby increasing prevalence of multifaceted interventions which can target students, their parents and communities in the early years.
2. Working with the different sectors to reduce the number of individual, discrete interventions, and focusing instead on coordinating multifaceted approaches to improve educational aspiration.
3. Incorporating strategies to improve parental and community engagement in relation to students' educational aspiration as part of broader education system programmes.
4. Collecting data on the magnitude and reach of programmes to better assess if there is an appropriate mix of interventions across the Victorian regions (adapted from McClelland, 2013, pp. 14–15).

Within Gippsland, low rates of both retention within secondary schools and involvement in tertiary education are typically suggestive of an undervaluing of education and skills, which adds to stereotypical assumptions around regional aspirations. There is little doubt that measurable variables such as retention and tertiary enrolment rates expose the challenges existing in regional Victoria. For example, the retention rate in Victorian metropolitan secondary schools is higher (90%) than for regional schools (70%) (DEECD, 2012a). Moreover, as noted in a report on the Gippsland Tertiary Education Plan by Lee Dow, Allan and Mitchell (2011), males are particularly vulnerable because 'only 63 per cent of Gippsland males are still at school at the start of Year 12, compared to 78.1 per cent of Gippsland females' (p. 7). Males are more likely than females to leave school in the hope of securing employment or apprenticeship opportunities, despite the uncertainty and high levels of youth unemployment of almost 18% in the region (VCOSS, 2015).

More generally, an Australian Government Productivity report indicated that students in metropolitan schools are 1.13 times more likely to complete Year 12 (the final year of schooling) than students in regional schools (SCRGSP, 2013). Whereas regional students are 2.5 times more likely to go into full-time employment post-school, metropolitan students choose higher education and/or vocational education (DEECD, 2012b). Within Gippsland, only 19% of students undertake tertiary education compared to 25.4% for the state (Lee Dow et al., 2011). As highlighted by Alloway and Dalley-Trim (2009), 'most rural youth do not have a post-secondary institution in or near their community, so educational decisions frequently involve financial costs' (p. 50). They also argue the impact of socio-economic issues on the aspirations and expectations of rural students should not be underestimated. More recent work by Hart (2016), Corbett (2016) and Corbett and Forsey (2017) suggests the complexities surrounding aspirations go beyond measurement of retention and tertiary enrolment rates, thus projects such as 'Broadening Horizons' may be the type of vehicle needed to challenge stereotypes relating to regional opportunity and aspiration.

Outline of the Project

The crux of the project involved development and trial of an innovative workplace learning programme, linking staff from RMF organisations and educators from seven Gippsland secondary schools to work collaboratively. Each school was to work with some of the 20 RMF partner organisations to develop a unit of work, connecting the world of work to school curriculum. Each school had to identify a relevant area of curriculum and a student cohort (either Year 7, 8 or 9). The unit of work aimed to enhance students' everyday learning while making it more engaging and relevant by linking it to the 'real world'. Parental engagement and connection to families were considered an important aspect of building aspiration, support and understanding, and therefore a link to families was made through each school's project plans.

It was important that initial contact between schools and partner organisations was scaffolded to ensure it occurred within a supportive environment with resources to help troubleshoot any potential problems. Beacon coordinated these meetings, beginning with a Project Launch and Introductory Workshop in March 2014. The research component was introduced here, and initial surveys were completed by schools and industry participants and aims for the project established. The relationship building phase included a series of facilitated workshops to enable schools and RMF organisations to get to know one another, discuss goals, develop a shared vision and begin planning.

Following this, a number of workshops focusing on practice were conducted, beginning with a Joint Professional Learning Workshop to explore the work in schools around 'positive education', approaches that look to develop problem-solving, identification of personal strengths and resilience development. The workshops explored how these concepts could be incorporated into schools' project plans, as well as adapted for use more broadly within RMF organisations. A session on successful approaches to enhance parental engagement was included to encourage schools to think about ways of engaging families. The final practice-oriented meeting was a Joint Professional Learning Workshop where schools and RMF organisations were provided with support and resources for the development of the units of work, including mapping out the content and creating a timeline of activity. A final Seminar Day was held later in the year where surveys were again completed by representatives of the schools and RMF organisations. They also participated in focus group interviews. Part of the day included a celebration of initial positive outcomes with presentations from students about their participation in the project through completion of the industry-based units of work. The project timeline is presented in Table 6.1.

The actual projects and school/RMF partnerships are outlined in Table 6.2, although school names are not included. The schools and industries were centred in three of Gippsland's local government areas (Latrobe City, Wellington Shire and South Gippsland Shire).

Table 6.1 Timeline of project during the initial year of operation—2014

Date	Activity
January	Project Working Group established by Regional Department of Education consisting of Principals and representatives from Beacon Foundation
February	Meeting with members of Gippsland-based RMF organisations with the potential for involvement in the project
March	Project Launch and Introductory Workshop held at FedUni Gippsland
May	Joint Professional Learning Workshops for schools and RMF organisations
June	Joint planning session between schools and RMF organisations
July–November	Implementation of the project in schools
December	Final seminar day/Workshop

Table 6.2 Outline of school projects

School	Partner RMF organization	Project focus
School A	Federation University; Department of Justice	Year 8—Curriculum area: team time • Students utilise a newly designed app—MIPs online, to capture goals, strengths and thoughts around careers/future employment • Mentors from partner RMF organisations' support students as they input their information
School B	Regional Development Vic; Baw Baw Shire Council; Department of Human Services	Year 8—Curriculum area: science • Year 8 students in small groups conduct a science investigation on a topic of their choice • RMF mentors support students as they carry out science investigations in science classes • Students present their findings at Science Expo for local primary schools, parents, community members and RMF mentors
School C	Department of Transport; VicRoads; South Gippsland Shire Council	Year 8—Curriculum area: think • Problem-solving activity on road safety and public transport (access and mobility): • Visit to VicRoads office to see roles that exist and interaction necessary to achieve outcomes

(continued)

Table 6.2 (continued)

School	Partner RMF organization	Project focus
School D	CFA; SES	Year 9—Curriculum area: think Disaster Resilience Programme • Change attitudes towards disaster resilience • Problem-solve real-life scenarios focused on emergency management and response • Explore career opportunities in Emergency Services sector
School E	Department of Environment and Primary Industries (DEPI); Bass Coast Shire Council	Year 9—Curriculum area: Connected Learning in Community (CLiC) • DEPI presents a problem from their organisation • DEPI assists students with the planning of a solution—through project management • DEPI helps to develop interdisciplinary skills required to succeed
School F	(DEPI); Wellington Shire Council	Year 8—Curriculum area: geography • DEPI provides real examples for students to be able to engage with curriculum based on key inquiry questions and geographic knowledge

NB: School G did not provide data so was not included in the data analysis

Conducting the Research Evaluation

The research was conducted as a case study incorporating a mixed methods framework and involved investigating the effectiveness of implementing work-embedded curriculum in raising students' aspirations. Ethics approval from Federation University, Australia and the Victorian Department of Education and Training (DET) was obtained.

The overarching research question was What are the perceived barriers and challenges to raising aspirations relating to future careers amongst Gippsland secondary school students? Two sub-questions were also framed, although this was a pilot project, these were mainly for guidance, as it was acknowledged only baseline data would realistically emerge in the initial stage. The sub-questions were:

1. How can involvement in an industry-based unit of work help in (a) identifying barriers/challenges faced by students; and (b) raising student aspirations in relation to future careers?
2. How can this information be incorporated into curriculum to make it more relevant and appropriate for secondary school students?

Participants included school principals, teachers, education support staff, students and also staff from partner RMF organisations. They were invited to complete surveys and participate in focus groups at various stages of the project, which aimed at gathering qualitative and quantitative data around their change in attitude, perception and understanding over the course of the project.

Barriers, Outcomes and Challenges Discussion

At the beginning of the project, an initial phase of data collection occurred via a survey of school teachers/principals and industry partner participants' perceptions about the challenges and possible benefits associated with involvement in this project. This was repeated in early December of the same year at the final seminar day where reports were presented by participating schools and an expanded survey was administered to all project participants seeking their perspectives on the value of engagement with the work-embedded unit of work, together with suggestions for future improvements. Focus groups with school and industry partners were also conducted on this day. Data collection also occurred from August to November from students in participating schools, who were invited to complete pre- and post-surveys about their perceptions of possible future careers and life choices. Only three schools provided student data for analysis; however, this still amounted to 164 valid pre- and post-responses.

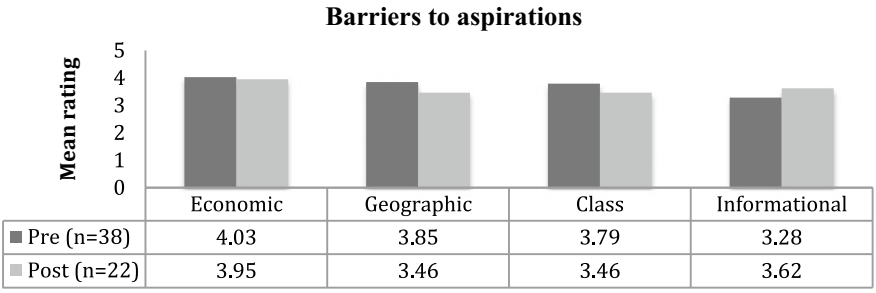
School and Industry Partner Data

During the Project Launch and Introductory Workshop, school and industry partner participants were asked to list aims of the project from their perspective. The following five aims were highlighted:

1. Establish community connections for schools and students,
2. Develop stronger ties of parental engagement in student activities,
3. Provide work education and raise awareness of workplace and career opportunities,
4. Improve student engagement in learning,
5. Encourage and enhance educational aspirations in the students.

The following comments from participants were representative of these aims, many of which are expanded further throughout the chapter. As participants explained, assisting students to make links with the pragmatics of the modern-day workforce and workplace was a key priority. They explained:

> Helping students understand that pathways to particular careers and industries are varied, and that the work involved in certain organisations isn't as it seems in the careers handbooks, as the real world of work is quite different (*Industry participant*).



	Economic	Geographic	Class	Informational
Pre (n=38)	4.03	3.85	3.79	3.28
Post (n=22)	3.95	3.46	3.46	3.62

Fig. 6.1 Participant ratings for challenges to student aspirations (pre-/post-involvement)

> We wanted students to be able to see that science matters in the real world; there's a bit of a disconnect between what students do in the classroom … they think that science is for brainy people, whereas in actual fact it's a part of their everyday world (*School participant*).

Perceived Barriers to Retention and Aspirations in Gippsland

School and industry participants were asked to rate factors impacting barriers to raising aspirations of students in regional secondary schools at the start of the project and the end of the year. Figure 6.1 illustrates that at both survey administrations, economic factors were perceived as presenting the biggest barrier while informational barriers were the only ones where ratings increased at the second survey administration, although there were not any major differences between pre- and post-ratings.

Main Benefits or Positive Outcomes

Survey data indicated that both schools and partner organisations identified the **relationships** formed through this project provided a range of important benefits, including increased transferable skills, engaging with global issues and pursuing local employment, as highlighted below:

> We have been able to sharpen our focus and raise the profile of interdisciplinary and C21st skills [21st century skills] at Year 9. Students have learnt a range of soft skills, such as team-work, communication, problem-solving, creative and critical thinking and how these skills are transferable to all jobs and careers (*School participant*).
>
> Access to school groups has been very beneficial for our staff members—they have been able to reacquaint themselves with their own pathways and reignite their own passions to help students experience what we are aiming to do with regard to sustainability and climate (*Industry participant*).
>
> It has helped in launching conversations about careers earlier, creating understandings around job opportunities that are available locally and also explicated expectations of potential employers. It has really assisted in establishing community links and providing really positive role models for our students (*School participant*).

Table 6.3 Main benefits/outcomes of participation in the project

Theme	Subthemes	Frequency of mention
Student related	Understanding workplaces, work roles/pathways	15
	Improved aspirations	13
	Shifting attitudes and awareness	11
	Meaningful, real-world learning connections	8
	Student contact with industry expertise	7
	Development of transferable skills	6
	Student engagement	5
	Growing mindsets	5
	Student impact	4
	Purposeful learning	2
	Personal development	2
School related	Parental engagement	6
	Supports student retention	5
	Inspires future student engagement	4
	Facilitated externally	4
	Staff engagement	3
	Programme development and enhancement	3
	Partnership support	3
	Inspiring new learning projects	2
Community related	Ongoing, committed, collaborative relationships	10
	Community connections	10
	Time-bound commitment for volunteers	4
	Support for development of positive behaviour/values	2

These ideas around the significance and impact of the project were further developed during focus groups at the conclusion of the pilot project, where more specific details were provided in relation to school-, student- and community-based benefits, as illustrated in Table 6.3. Following the table are representative comments highlighting the themes.

Some of the themes emerging from the open-ended questions in the survey covered a variety of areas and indicated changes in perceptions of both teachers and members of partner organisations in relation to the possible and actual benefits associated with project involvement. The value of linking the learning from this project into future curriculum development or specifically making connections between practical experiences and school learning underpinned many of the responses. While comments pointed towards the benefits across schools and the community, others

focused specifically on career development for **students**, as highlighted by the following comments:

> We've been able to share some learning and some understandings around growing mindsets, sort of positive psychology, positive education approaches …. and I think that is a really interesting part where many of the agencies and organizations thought these things were already happening in schools (*School participant*).
>
> I definitely think it raises aspirations, I think having those soft skills that they're learning to be able to utilise throughout their careers is fantastic (*Industry participant*).

In relation to **school** benefits, one participant suggested, 'We've seen a real difference in our students and in their engagement,—parental engagement has also been a massive result of this project'. Another participant explained: 'The main benefit for us was … really learning about each other's worlds—of work and school, so forging relationships was probably a really good positive outcome … The goals we set out to try to achieve weren't as significant as perhaps we had hoped for, but they were still very powerful'.

In terms of **community** benefits, the following comments brought to light the importance of established relationships and connectivity between industry and schools, which was highlighted as a key concern by many of the participants:

> The beauty of this project was it was a time-limited bite-sized project so people who were volunteering knew it was time limited and specific about what their role would be. I think it's hard for businesses to know how to connect with schools, there's a willingness but I don't think there's been a mechanism until now (*School participant*).
>
> There's actually untapped opportunities for us. One of the comments a parent made to me was, look the fact you're the Department of Justice and you're coming along on this journey of our kids, as far as their education is concerned, you never know that really positive relationship may in fact make them think twice about doing anything wrong in their life. So really coming back to a very early stage where we can assist in the whole behaviour and values and understanding that there are laws and rules that we need to abide by, and hopefully they won't end up in the criminal justice system at some stage (*Industry participant*).

Main Challenges Within the Project

During the focus groups, participants reflected on challenges encountered throughout their project involvement. As outlined in Table 6.4, resourcing in terms of time and funding was a major challenge, with both schools and industry partners highlighting the difficulty of organising innovative practices within regimented frameworks.

In relation to the **establishment** of the project, the following participant explanations highlighted a number of challenges experienced in forming partnerships between schools and industry in the region, particularly for the purpose of building student aspirations through sustained collaboration. By way of example, one industry participant explained the challenge of 'Just getting our heads around understanding each other's business of work, and the timetables we both operate by…and just trying to sort of find that space and time where we could all come together'. Another school participant described:

Table 6.4 Challenges associated with involvement in the project

Theme	Subthemes	Frequency of mention
Establishing a successful framework for project	Establishing partnerships, shared goals	5
	Access and isolation	3
	New project stress	3
	Establishing enduring relationships	3
Administration of project	Workload and timeframes	8
	Funding and resources	8
	Need for evidence	3
Operation of project	Evolving, dynamic programme	7
	Parental engagement	7
	Level of expectation	4
	Teacher capacity	2
	Student engagement	2

> Schools might have a short-term relationship with an organisation based around, an individual teacher or principal, and that just wasn't going to be strong enough to sustain in terms of meaningful projects that were really going to do the things we wanted to do, which involved building student aspirations (*School participant*).

Regarding the **administration** of the project, resourcing, in relation to finances and workload were major challenges highlighted by both schools and industry representatives:

> To get a group of teachers together in their own time to write something because it sits outside, and you want to embed it. It's not wasted work but it's that resourcing … we ended up with two farm visits and we could only do that because a couple of the farmers came down and helped out with their big people movers (*School participant*).
>
> The challenge for us was trying to determine whether we were having any impact – the students were very keen to be involved and it certainly looked like their thinking was being challenged in relation to the problems we presented and the solutions they were coming up with were really valuable. But did we just see what we wanted to? There does need to be some way of really collecting some valid evidence of impact and then looking at how to integrate that even further (*Industry participant*).

Further to these findings, the **operational** challenges revolved around expectations and capacity of the project and attempt to mesh the two. Participants told us 'It wasn't so much a weakness but a major challenge with expectations, when you've got non-teachers coming in every Wednesday for six or seven weeks thinking, whoa, you know, the kids are not up for it today'. Further to this, an industry participant suggested that 'All the great ideas of getting out and being involved ended up being met with the realities of time, budget and process constraints. We probably didn't anticipate the difficulty in coordinating'.

One theme that emerged as both a challenge and a positive outcome related to **parental involvement**, which was one of the implicit aims of the programme. With regard to school responses about the impact of parental involvement, most admitted that the project had not been as successful as they would have liked. By way of example, one school participant told us: 'Parental engagement became quite difficult. There is low level of parent engagement in secondary college. The busyness of the project implementation meant that contacting parents, getting them engaged and getting them involved, we probably fell short on, and that's probably the area to lift the most next year'.

However, one school, in particular, managed to pique parental interest through hosting an Expo, which a large number of parents attended. The industry partner for that school commented on the power and influence parents held to raise student aspirations, as well as the importance of capitalising on the opportunities provided by projects such as this, where parents may be more likely to make connections. In relation to this finding, one industry participant told us 'I was highly impressed with the parent involvement… it made a difference for the students'. Some of them commented on the fact that their parents asked questions about this unit, whereas they did not normally ask about school curriculum.

The main findings from the data provided by the school and industry participants suggested the project was worthwhile. Although there were challenges associated with overall involvement, the building of relationships and increased understanding that resulted from the collaboration was invaluable and worth developing. There was also acknowledgement that the aims developed in the initial workshop had all progressed, although the impact on student aspirations was obviously a more complicated and longitudinal goal that would be difficult to measure in the short term. The student data, which is outlined in the next section, provided some interesting insights in relation to this point.

Student Survey Data

Students at participating schools were asked to complete surveys prior to beginning the work-embedded unit and then again on completion of the unit. Three schools (B, C and F) provided their pre- and post-responses for analysis, resulting in 169 valid surveys.

Part A: Student Expectations and Actual Experience as Project Participants

Table 6.5 outlines the pre- and post-rating students provided to 30 statements related to the project aims. The statements in the initial pre-survey asked students to reflect on their expectations relating to involvement in the project, specifically in relation to completing the work-embedded unit of work. The post-survey statements related

to their perceptions about what they had gained from involvement in the work-embedded unit of work. Students were asked to rate their pre-expectations from 1 to 10 (from not at all likely to highly likely), while the post-survey asked for a rating from 1 to 10 in terms of their actual experience (from not at all true to very true). The responses for each of the three schools that provided data are included in Table 6.5, individually and then as a combined total. Mean ratings for pre- and post-responses are presented in conjunction with an arrow indicating whether ratings had increased or decreased over the time period. A series of asterisks are also included to indicate whether the rating change was statistically significant at the alpha levels of 0.05, 0.01 or 0.000. Statistical significance simply provides a level of confidence that the change in results had a higher likelihood of being due to involvement in the programme rather than chance. The grey highlighting illustrates the highest mean rating (out of 10) for the post-survey responses.

Increased ratings indicate a perception that the experience had been more beneficial than expected, while a decrease indicates expectations had not been met. Overall, just over half (16) of the responses increased over time, 13 decreased and one remained the same. In terms of individual schools, School B had 14 increased ratings (4 statistically significant), 13 decreased (3 statistically significant) and 3 that remained the same. School C had 24 increased ratings (7 statistically significant), 5 decreased ratings and 1 remaining the same. School F had only 7 increased ratings (1 statistically significant) and 20 decreased (1 statistically significant) with 3 remaining the same. However, School F also had 26 of the 30 post-rankings that were the highest of all groups, indicating that their expectations at the start of the project were also higher than the other schools. Overall rankings for the post-responses were mainly above 6.5, with almost 75% of post-responses above 7, indicating a high level of belief by students that they had benefitted from participation in the project.

Students appeared to be more aware of industry processes and workplace requirements as a result of their participation, with an increase in understanding of possible future pathways. However, students indicated uncertainty regarding what they really wanted to do when they left school. Another interesting result was in relation to making new friends, which was obviously an expectation that did not eventuate. Skills in relation to self-understanding and soft skills such as independence, problem-solving and conflict resolution did not increase, indicating that expectations were not met, which is understandable in the limited time frame.

Part B: Future Intentions of Students

The impact on students' future intentions fits with one of the themes underpinning this book, namely, transformative agency through education. Although not an explicit focus within the evaluation, there was an implicit hope that this type of involvement and the concomitant connections made between school and life after school would have a transformational influence on student aspirations. It could also possibly indicate for us as regional university academics some potential further work with and for those students reporting as uncertain about their post-school trajectory and choices.

Table 6.5 Student survey results

Through being involved in the industry-based unit of work I expect to (pre)/*have* (*post*)	School B (n=78)		School C (n=50)		School F (n=36)		Total overall change
	Pre	Post	Pre	Post	Pre	Post	
1. Enjoy (*ed*) applying my learning in a real-life situation	6.3	6.7↑	6.2	7.1↑*	7.5	7.1↓	↑*
2. Enjoy (*ed*) challenge of learning in a different environment	6.5	6.6↑	6.2	7.3↑***	7.5	7.7↑	↑*
3. See (*seen*) the connection between my school learning and my industry learning	6.2	6.6↑	5.9	6.9↑**	7.1	7.0↓	↑**
4. Gain (*ed*) a better understanding of everyday life	6.7	6.9↑	6.9	7.2↑	8.0	7.9↓	↑
5. Be (*not been*) scared to go into an unfamiliar workplace	4.7	7.2↑***	4.3	7.8↑***	4.7	7.8↑***	↑***
6. Understand (*understood*) what I can do when I finish school	6.7	7.0↑	7.3	7.5↑	8.1	8.0↓	↑
7. Understand (*understood*) that money will not stop me from reaching my potential	6.5	7.2↑*	6.8	7.4↑	7.0	7.4↑	↑**
8. Understand (*understood*) where I live will not stop me from reaching my potential	7.1	7.6↑*	7.1	7.6↑	7.0	7.0=	↑*
9. Understand (*understood*) what I really want to do when I finish school	6.8	6.5↓	7.2	7.0↓	7.4	6.8↓	↓
10. Become motivated to study harder in school	6.6	6.8↑	6.6	6.8↑	8.0	7.8↓	↑
11. Understand (*understood*) the importance of discussing my future with my parents	6.9	6.5↓	6.9	7.0↑	7.6	7.0↓	↓
12. Understand (*understood*) I am in control of my own life	8.0	7.7↓	7.4	8.2↑*	8.5	8.1↓	=
13.Be (*become*) aware of local organizations I might like to work in when I finish school	6.8	6.6↓	6.5	7.2↑*	7.8	8.5↑	↑
14. Be (*become*) aware of local institutions I might like to study in when I finish school	6.4	6.4=	6.4	6.9↑	7.6	7.8↑	↑
15. Know (*learned*) how to push myself	7.4	7.3↓	7.2	7.3↑	8.0	8.3↑	↑
16. Know (*learned*) how to manage myself	7.3	7.1↓	7.3	7.5↑	7.9	8.0↑	↑
17. Get (*got*) along well with the people involved in the unit	6.9	7.5↑*	7.6	7.8↑	8.4	8.4=	↑
18. Learn (*learned*) how to resolve conflict	6.5	6.6↑	6.9	7.0↑	7.8	7.4↓	↓
19. Come to understand how others think	6.7	6.8↑	6.7	7.3↑*	7.7	7.7=	↑
20. Learn (*ed*) how to problem solve	6.9	7.0↑	7.5	7.2↓	7.9	7.8↓	↓

(continued)

Table 6.5 (continued)

21. Learn (*ed*) more about how I think	7.1	7.2↑	7.1	7.6↑	8.1	7.8↓	↑
22. Learn (*ed*) who I am as a person	7.0	6.8↓	7.2	7.2=	8.1	7.7↓	↓
23. Make (*made*) new friends	7.4	6.1↓***	6.9	6.1↓	8.2	6.4↓***	↓***
24. Grow (*n*) in independence	7.0	7.0=	7.1	7.0↓	8.4	7.9↓	↓
25. Learn (*ed*) to use my initiative	6.8	6.8=	7.0	6.8↓	8.2	7.9↓	↓
26. Become (*became*) more self-directed in my learning	7.0	6.8↓	6.8	7.0↑	8.2	7.6↓	↓
27. Take (*n*) responsibility for my own learning	7.4	7.1↓*	7.1	7.6↑	8.5	8.0↓	↓
28. Learn (*ed*) how to get along with other students in the unit	7.3	7.1↓*	7.1	7.6↑	8.3	7.6↓	↓
29. Learn (*ed*) to grow in self-confidence	7.5	6.9↓	7.1	7.3↑	8.1	7.4↓	↓*
30. Learn (*ed*) how to value community	7.2	7.0↓	7.1	7.2↑	8.2	7.8↓	↓

*$p < 0.05$, **$p < 0.01$, ***$p < 0.00$

As it turned out, there was very little change from students' pre- to post-responses in relation to future intentions regarding education, work or study. There was a slight increase in relation to interest in TAFE and university; however, the figures relating to jobs and apprenticeships remained exactly the same, as illustrated in Fig. 6.2.

Nonetheless, these figures present an interesting picture, as they are considerably above the statistics at that time for Gippsland in terms of secondary school completion (70% in 2012). Within this sample, 84% intended to finish secondary school, and almost half (47.6%) wanted to attend university, but there was also solid interest in TAFE/apprenticeships and jobs, again suggesting a clear role and possibility for our regional campus to reinvest in the region (see Chap. 1 discussion on 'regional research reinvestment') through undertaking and learning from contracted research like this project.

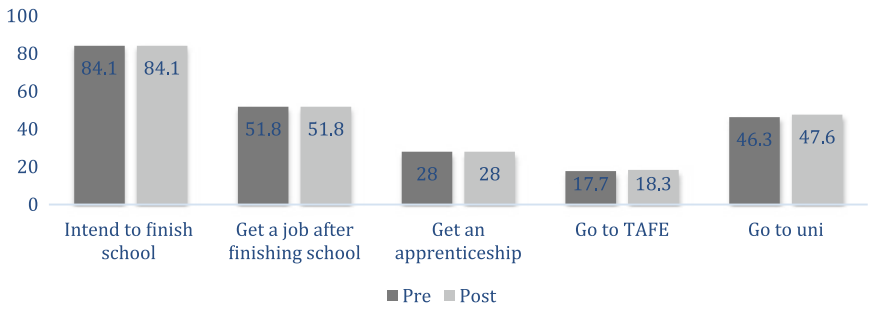


Fig. 6.2 Student intentions regarding education, work and study (pre and post)

It should be noted that some students responded to a number of alternatives (e.g. go to uni or TAFE), which is why percentages do not equal 100. Overall, however, it appears to be representative of a high level of aspiration, but the reality in terms of opportunities may not match, particularly with youth unemployment rates and restrictions on university/TAFE places in regional areas tending to be higher than in metropolitan areas. This further demonstrates the complexity of regional aspirations as argued by Corbett and Forsey (2017) previously mentioned.

Part C: Student Perceptions of Benefits and Challenges Related to Project Participation

A written section of the student survey required participants to outline their perceptions of benefits and challenges associated with their participation in the work-embedded unit of work offered at their schools. Although students were asked to provide written responses to questions on benefits and challenges at both the pre- and post-survey stages, few responded in any detail to the pre-survey questions. As a result, Table 6.6 includes the responses only from the post-surveys, which included written responses from virtually all students. This could have been due to the focus of the pre-survey on anticipated benefits or challenges, while the post-survey asked for details of benefits and challenges that had actually been experienced. The latter was probably easier for the students to articulate.

Most comments fell into devised categories of personal, intellectual or technical for both benefits and challenges. Some students mentioned a number of points in their responses while others focused on one aspect. Accordingly, the number of mentions for each section does not necessarily equate to overall student numbers.

Some written responses provided a different representation of the student viewpoint compared to the data presented in Table 6.6. This is not uncommon in mixed methods research, which enables different forms of data to be collected and analysed enabling a fuller picture of participant viewpoints.

While disappointing that only three of the seven participating schools provided their student data for analysis, the anecdotal feedback from the other four schools mirrored the formal data collected, which considered the project worthwhile. The actual data illustrated a growth in understanding by students of possible pathways and of different ways of learning. While longer term analysis is needed, there were indications of some positive impact on engagement and aspirations, which was a major aim of the project.

Part D: Student, School and Industry Participant Ratings for Involvement in the Project

In the post-survey, students were asked to provide a rating out of 5 for their participation in the unit of work. The lowest rating of 2 was given by a minority (8.5%), while more than 56% of the students rated it as 4 or 5, indicating a high

Table 6.6 Student perceptions of benefits and challenges

Themes			No. of mentions
Benefits	Personal aspects	Learning was fun/different learning environments	76
		Learned about real life—saw connections	42
		Made connections with community	30
		Learned to work in a team	24
		Met new people, made new friends	20
		Developed more confidence	17
		Learned from mistakes	9
	Intellectual aspects	Learned new stuff (information and skills)	51
		Provided a new challenge	36
		Made connections between (e.g. science/maths/technology and life/work	31
	Technical aspects	Learned how to devise surveys, write up reports, use IT effectively	20
		Well organised and supported	9
Challenges	Personal aspects	Dealing with group work	44
		Out of comfort zone—working with mentors, presenting findings	28
		Still not sure of careers	26
		Did not meet expectations	15
		Did not learn enough about self	16
	Intellectual aspects	Coming up with a topic, plan/questions	35
		Dealing with challenging material/concepts	33
		Knowing how to research/find information	28
		Organising and coordinating	21
	Technical aspects	Technology limitations	18
		Timelines—work not completed	14
		Wrong activity choice	10
		Lack of support	8
		No excursions	6

level of satisfaction. School and industry participants were also asked to rate their experience of the industry-based unit of work that they were involved in out of 5. The mean rank was 4.38 indicating a very high level of satisfaction. Qualitative data associated with these findings suggested that participants 'Particularly appreciated the opportunity to be involved with the wider community, and with students being exposed to the REAL skills they need… it has the potential to move them from content to transformative skills'. Although another industry participant suggested there was room for fine-tuning, they believed '… this is one of the best opportunities we've had in a long time for bringing about real growth'. As a future employer of school graduates, 'I can see the long-term value of this in regional schools in particular and sincerely hope that it continues'.

Addressing the Research Questions

The overarching research question guiding this project was 'What are the perceived barriers and challenges to raising aspirations relating to future careers amongst Gippsland secondary school students?' Despite being a small-scale pilot investigation, the study illustrated the complexity associated with regional aspirations. Many of the participants, including the students, perceived a disconnection between what happens in the classroom and in everyday real life. Stronger and more frequent connections between the curriculum and the real world, especially with real-world situations, may help to address these concerns. Examples from the project such as observing actual court cases, using maths and science outside the classroom to solve problems, presenting to outside audiences using actual data in graphs and tables together with writing for other purposes such as survey creation, all helped to make connections.

The indicators from this study strongly imply that an industry-based unit of work has many benefits for most students, and also assists in identifying the barriers and challenges faced by many students. However, longitudinal data is required in order to determine the potential for raising aspirations in regional areas and it needs to be examined in a more contextualised way, taking into consideration the points raised by Hart (2016), Corbett (2016) and Corbett and Forsey (2017). To effectively address the question 'How can this information be incorporated into curriculum to make it more relevant and appropriate for secondary school students?' will take time, largely because it is concerned with changing the mindset of secondary teachers and breaking down the barriers of discrete curriculum areas.

Summarising the data provided by students, schools and communities, the most significant **benefits** of this project were given as follows:

- Improved understanding of workplaces, work roles and pathways,
- Explicit focus on building aspirations and student retention,
- Making links between school and work more explicit,
- Focus on parental engagement,
- Building ongoing, committed, collaborative relationships,

- Creating community connections.

The ongoing **challenges** are explicitly linked to having the right people in place to coordinate the school-based component and having the financial resources to do so. Furthermore, valid empirical evidence of the impact of the project needs to be systematically gathered to provide evidence of impact so that new ways can be found to integrate industry with schools. Some schools, one in particular, had very successful parental involvement, which in turn had a major impact on the learning and engagement of the students involved.

Conclusion

The outcomes of this project assist in understanding how to engage students to broaden their aspirations for future education, training or employment, which ultimately has the potential to increase the rate of positive outcomes for young people in Gippsland. Through the identification of the barriers, which includes economic, geographic, informational and class factors, understandings have been developed in relation to the effectiveness of partnerships between education authorities, industry, schools and universities.

Ultimately, the significance of this project lies in the information that can be gleaned from perceptions of stakeholders in relation to aspirations of Gippsland secondary school students regarding future careers. While research has shown that young people in regional Victoria are less likely to complete secondary and post-compulsory qualifications than their metropolitan counterparts (McClelland, 2013), projects like this illustrate the complexities associated with youth aspirations in a regional context and may help to challenge associated unsubstantiated stereotypes. The findings also bring to light the myriad benefits associated with the development of a work-embedded unit that saw schools and industry break down a range of traditional barriers to work closely together to provide valuable learning opportunities for a large number of Gippsland secondary students. Even from this small pilot, a solid body of evidence has been collected, which supports the value of continuing and refining this type of partnership work.

Although a 2016 Australian Government report by the Department of Industry, Innovation and Science, titled ‘How Regional Universities Drive Regional Innovation’, did not specifically mention school/industry/university partnerships, a number of the conclusions related to industry partnerships with universities. Specifically, Conclusion 10.2 stated, ‘It is important to find ways to support the antecedents of sustained university-industry engagement, outside of the confines of specific research programmes’ (p. 14). This is the particular space in which the Broadening Horizons project was embedded.

While no specific funding was available to formally evaluate the final iterations of the project, it was decided that involvement from the local university would help to build reciprocal relationships. This undertaking has certainly born fruit with

a number of funded partnerships between the regional Department of Education (DET) and Federation University now underway. Given earlier concerns about how a regionally focused Federation University would operate in place of the previous Monash University campus, (one of the 'Group of Eight' [G08] top-ranked universities in Australia), this partnership is testimony to the new partnerships now being brokered. In light of this outcome, I offer some final thoughts on the research journey that led to the development of the book which houses this chapter.

As a member of the FUGuE collaborative and lead author of this chapter, I have been afforded the opportunity to discuss, reflect on and eventually interrogate not only the content of my research but also my methodological preferences and skills. The FUGuE members are diverse in terms of research experience and research approaches, which is refreshing, as so often research groupings tend to be developed around specific criteria. From the beginning, the aim of FUGuE was to create an open space where different research perspectives and practices were not only accepted but welcomed. Initially, I joined the collective with the thought of providing a mentoring role, as I was one of the more senior academics in the group. Instead, from my involvement I have come away with many new understandings and a greater appreciation for other ways of researching. In a small regional university environment, I believe this sort of collaboration is imperative.

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Part II
Regional University Educational Researchers and Self-reflexive Transformations

Chapter 7
Transforming Futures for Koorie Pre-schoolers in Gippsland Through Community-Educative Partnerships

Sue Emmett, Cheryl Glowrey and Nicholas Johnson

Abstract Australians of Indigenous descent within south-eastern New South Wales and Victoria generally self-identify as Koorie. Gippsland's Indigenous population is concentrated within the main regional centres of the Latrobe Valley and the more remote areas of east Gippsland. Within these demographics, early childhood services have a crucial role to play in supporting young Koorie children and their families in multifaceted ways. These services are tasked with actively promoting the sustained collaboration and participation of the Indigenous community from a Gippsland standpoint. The capacity of Gippsland to meet the outcomes for early childhood education identified in Victoria's *Marrung Aboriginal Education Plan 2016–2026* is closely concomitant upon the ability of early childhood services to reflect family and community values and funds of knowledge. With these considerations in mind, this chapter discusses the opportunities, barriers and aspirations of Indigenous families accessing and engaging with early childhood services in Gippsland. The voices of the Gippsland Indigenous community are reflected through researcher interviews with Indigenous educators and leaders linked to the early childhood services. Many progressive examples of strong and affirming partnerships between the Indigenous community and early childhood services are revealed within this chapter. The chapter concludes with a brief discussion on the significance of the research for the Gippsland region, which was undertaken by Federation University Australia (FUGuE) researchers from a regional university in conjunction with colleague Nicholas Johnson, a Gunai, Monero Ngarigo and Gunditjmara man.

Keywords Gippsland's Indigenous population · Indigenous educators · Early childhood education · Indigenous engagement in education · Educational challenges

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Introduction: Engagement in Early Childhood Services for Koorie Families and Carers in Gippsland

The Melbourne Declaration on Educational Goals for Young Australians (2008) articulates two goals: that Australian schooling promotes equity and excellence and that all young Australians become successful learners, confident and creative individuals and active and informed citizens. It is important that children commence formal schooling as confident and enthusiastic learners. The child's engagement in quality early childhood education prior to beginning school promotes positive developmental outcomes establishing a strong foundation for ongoing learning. Furthermore, it is claimed, 'there is growing evidence that participation in quality early childhood education improves school readiness and lifts NAPLAN [National Assessment Program—Literacy and Numeracy] results and PISA [Programme for International Student Assessment] scores' (Pascoe & Brennan, 2017, p. 6). Investing in children in their early years increases their emotional and social well-being and future educational opportunities. It is paramount, therefore, that young Koorie children have opportunities to consistently engage in quality early childhood education.

Whilst the immediate and extended family are well placed to foster the well-being and educational opportunities of young Koorie children, early childhood services have crucial responsibilities to achieve this in multifaceted ways. This includes actively working to promote the sustained collaboration and participation of the Koorie community more broadly. Gippsland's Koorie population includes many young families and children participating successfully in early childhood and maternal health services across the region. Currently, an extensive network of educators strives to achieve educational goals and outcomes that support a community impacted by generational trauma and disadvantage.

The underpinning aim of the research highlighted in this chapter was to better understand the issues surrounding access to and engagement in early childhood services for Koorie families and carers in Gippsland. The key question informing the research was 'What are the opportunities and barriers for Koorie families accessing and engaging in early childhood education services in Gippsland?' The significance of this research was twofold: to better understand how the region is meeting the needs of a growing, and in some places, disadvantaged sector of the population, and to examine the issues and practices that might improve equity. Given the current lack of understanding about this topic within the region, the case-study research would fill a missing gap around the impact and challenges of Koorie educators and leader's involvement with early childhood services. Ethics approval secured through Federation University Australia and the Victorian Department of Education and Training enabled us to conduct several interviews with key Koorie educators and leaders.

This project respects the importance of 'relatedness' in an Aboriginal and Torres Strait Islander perspective on research (Martin, 2008). Applying a relatedness perspective means acknowledging an epistemology where Aboriginal and Torres Strait Islander ways of knowing, being and doing are culturally different to Western

epistemologies (Martin, 2008). The research recognises Aboriginal and Torres Strait Islander people's Indigenous knowledge and respects their agency in speaking about issues surrounding early childhood education. The findings of the research form part of a greater commitment to the collaborative sharing of results, which respectfully includes the viewpoints of Indigenous Australian people, consultation and appropriate protocol (AIATSIS, 2012).

Early Childhood Education in Regional Gippsland: 'The Current Education System Does Not Cater for the Needs of Our Mob'

It is important to place early childhood education in the broader context of regional, rural and remote communities within Gippsland. The diversity of Gippsland creates unique circumstances for communities throughout its six local government areas. Geographically, distance divides centres of population, tending to isolate people from services and heightening well-documented regional challenges such as attracting and retaining teachers and other professionals, a problem highlighted across several chapters in this book. Decades of restructuring in the agriculture, timber and mining industries (the primary areas of employment for Gippsland families) has left significant disadvantage in communities across the region (Vinson, Rawsthorne, Beavis, & Ericson, 2015). Such problems are complex and require an understanding of each community (Reid, 2017). Addressing socially unjust issues in rural areas takes more than a traditional distributive approach of providing additional resources. The complexities of social and cultural factors in each community suggest the need for approaches that recognise the rights of diverse groups and provide a voice for people in decision-making about problems that impact on them (Cuervo, 2016). Such participatory social justice approaches accommodate many voices and overcome practices of presuming to know what people want (Cuervo, 2016). This form of plural social justice is particularly pertinent with regard to working with the diversity of Koorie groups and communities across the Gippsland region.

In 2010, the Gunaikurnai community achieved a vital milestone after a tumultuous 13-year campaign in Gippsland: their native title rights were recognised by the Federal Court of Australia (Gunstone, 2014). According to Gunstone, this acknowledgement was significant in many ways because 'the Gunaikurnai people also signed other agreements, including an Indigenous Land Use Agreement, which recognises native title rights, details employment opportunities, provides government funding, recognises cultural issues and enables co-management' (2014, p. 80). Although this hard-earned recognition of rights strengthened the Koorie communities' sense of agency and identity, 170 years of colonisation, dispossession of the land, racism, cultural and language degradation and fundamental violation of human rights, including the often-forcible removal of children from families, and child abuse, had taken its

toll. Despite identity remaining strong for many Koorie people, intergenerational traumatic experiences have often manifested in vulnerability and disadvantage.

Recognition of native title rights initiated the establishment of the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC). The Corporation represents traditional owners from the Brataualung, Brayakaulung, Brabralung, Krauatungalung and Tatungalung family clans, and is the Registered Aboriginal Party for the Gunaikurnai claim area, as decided by the Victorian Aboriginal Heritage Council under the Aboriginal Heritage Act, 2006. It has a membership of more than 666 traditional owners, all of whom have proven their ancestral links to one of the ancestors registered in the Native Title Consent Determination. The GLaWAC board represents the formal decision-making forum for the Gunaikurnai, and in their strategic plan, they make explicit the importance of their culture in education:

> The current education system does not cater for the needs of our mob—our young people need to be taught the right things in the right way. We need to look beyond the current mainstream curriculum to make sure they are also being taught cultural knowledge. There is little Aboriginal cultural education in schools and this is a problem not only for Gunaikurnai kids who are missing the opportunity to understand their culture in context, but also for the broader community. Unless cultural awareness begins early in the education system, we cannot hope to bridge the gap in understanding and build more respectful and equal relationships in the community (GLaWAC, 2015, p. 28).

The complexity of the Aboriginal and Torres Strait Islander communities of Gippsland today are, in part, due to the consequences of State Government policies, including the series of policies under which children were removed from their parents, now described by the term the Stolen Generations. Estimates of the numbers of children removed from their families at a state level are made difficult because records are not available. However, figures of as many as 20% during the 1950s and 1960s, and about 5% in the following decades have been suggested, affecting every Koorie family in Victoria (Broome, 2005). The impact of the removal of children from their parents and placed in out-of-home care was noted in the *Bringing Them Home Report* (HREOC, 1997). The figure for Koorie children living in out-of-home care has continued to rise in recent decades and in Victoria, Aboriginal and Torres Strait Islander children are 15 times more likely to be in out-of-home care than non-Aboriginal children (SNAICC, 2017). The percentage of Koorie children within Gippsland who are currently in out-of-home care, often as a result of family violence, substance abuse and other harms experienced within the family home is significant and contributes to the issues of transient children accessing early childhood services. This removal of children from their home environment can often be associated with additional psychological and/or physical trauma compounded by cultural dislocation.

Trauma experienced by an individual or a group of people can be multilayered and may have both psychological and physical ramifications. In 2013, Peter Horton, CEO the Trauma Centre of Australia defined trauma as a psychological wound occurring as a consequence of a person's perception of a stressful event (Horton, 2013). Although no specific literature is available regarding the manifestations of trauma as a result of a turbulent history on the Koorie community in Gippsland, literature in relation to the traumatisation of Aboriginal Australians, in general, abounds. Trauma of an

intergenerational nature is very significant in relation to the travails of Aboriginal people and can be defined as the effect of emotional or psychological harm on an individual or a community that has been passed through the generations from adults to children (Muid, 2006). It has been posited that the communal memory of a cultural group can hold historical trauma and that this is transferred through the generations, and in time becomes 'normalised' (Duran & Duran, 1995). Milroy discusses the ways this trauma affects the next generations, suggesting 'impact on the attachment relationship with caregivers; the impact on parenting and family functioning; the association with parental physical and mental illness; disconnection and alienation from extended family, culture and society' (2005, p. xxi). Milroy goes on to suggest that trauma also contributes towards a general lack of trust of authority figures, including school teachers.

The Koorie population of Gippsland is increasing, with the 2016 census showing 4177 Aboriginal and Torres Strait Islander people living in Gippsland, which is 1.5 percent of the total population for the region. The median age for Aboriginal and Torres Strait Islander people in Gippsland is 22 years compared to 45 years for the general Morwell population (in Latrobe Valley). The median age varies between 18 years in Morwell and 25 years in East Gippsland. With half of the Koorie population aged less than 22 years and the percentage of Koorie children aged between 0 and 4 years, more than twice that of the general population, the importance of quality early childhood services in Gippsland must be considered a priority (refer to maps in Chap. 1 this volume for geographical and cultural information).

Investing in the Educational Futures of Koorie Children

The early years from birth to 6 years of age are critical in establishing a positive foundation for a child's development and learning. Starting out in a healthy, safe and loving environment with secure relationships increases a child's chances of success throughout their life (Goldberg, 2000; Sroufe, Egeland, Carlson, & Collins, 2005; Weinfield, Sroufe, Egeland, & Carlson, 2008). Access to and engagement within early childhood services, including maternal and child health, supported playgroups, kindergarten and childcare programmes provide support to families in the education and care of their children. Quality early childhood education offers a critical window for children to develop skills in relation to language and communication, problem-solving, emotional regulation, self-confidence and social capability needed for school and life success.

Despite early childhood services having a crucial responsibility for supporting families, such services are currently not fully accessed by Koorie families in Gippsland. In relation to this, a key goal of the Victorian *Marrung Educational Plan 2016–2026* (MEP) is to improve access to, and participation in, early childhood services including Maternal and Child Health, supported playgroups and kindergarten programmes (Victoria, 2016b). The key aspects of the MEP goals are for excellence in teaching in the early years to ensure Koorie children are prepared for life. A vital

aspect of this outcome is to acknowledge parents as the first educators of their children and promote strengthening a culture of professional leadership where Koorie leaders are included in all sectors of education, including early childhood. The goals also emphasise the importance of creating learning communities where services and Koorie communities work at the local level to improve outcomes through Koorie people's participation in decision-making (Victoria DET, 2016b).

The importance of relatedness and relationships, culture and family are high priorities for Koorie communities. Further to this, high-quality early childhood education helps prepare students for the transition to school, and schools that employ and value Aboriginal and Torres Strait Islander staff provide 'ready' links between school, families and communities which can enhance the transition for children (Dockett, Perry, & Kearney, 2010). Early childhood programmes that combine a focus on child educational experiences and parent–child relationship building have demonstrated positive impacts on readiness for school. As Dockett et al. (2010) argue, school readiness and later success at school are influenced not only by the abilities of the individual, but by the readiness of the school, family and communities. Research shows that students start to build aspirations about education from 6 years of age, and that their mothers are directly influential in how students view their future schooling (McClelland, 2013; Plunkett & Dyson, 2015).

One of the recommendations within the report *Research into Education Aspiration for Regional Victoria* (McClelland, 2013) was to maintain working with parents and communities to impact student educational aspiration, a point in line with the understanding that engaging parents in children's education improves educational attainment and ongoing engagement in school (Higgins & Morley, 2014). Involving parents also improves parental cultural and social capital, the latter being a precondition for educational attainment. Further to this understanding, Black argues that education is the most effective way to build social capital (2008). The importance of schools and early childhood centres in building positive and trusting relationships with the child, parents and community as a basis for engaging students in learning, together with the recognition of culture in schools have been identified as critical to the engagement of Aboriginal and Torres Strait Islander students (Ockenden, 2014).

The Australian Early Development Census (AEDC) measures young children's development nationally across five domains: physical health and well-being, social competence, emotional maturity, school-based language and cognitive skills and general knowledge at the time of beginning school. At a national level, AEDC data for 2015 indicated that 22% of children were vulnerable on one or more domains and 11.1% were vulnerable on two or more domains. Significantly, a total of 42.1% of Aboriginal and Torres Strait Islander children were identified as developmentally vulnerable on one or more domains. The AEDC found that the local government areas of East Gippsland and Latrobe City (central Gippsland) had the highest percentage of vulnerable children for the Gippsland region. Notably, Latrobe City had 29.5% of children displaying vulnerability on one or more domains and 18% showed vulnerability on two or more domains.

These figures for Latrobe City are substantially higher than the national figures with the results displaying a significant increase in the areas of physical health and

well-being, social competence and emotional maturity for vulnerable children from the AEDC in 2012. In the Latrobe City, a significant increase in the AEDC domain of language and cognitive skills between 2012 and 2015 for children who are on track is an outcome that reflects the work of early years educators with children and families in the preschool arena, including attendance. As a measure of school readiness, the AECDC domains of *Language and cognitive skills (school based)* and *Communication skills and general knowledge* are critical, and strongly correlate with subsequent academic achievement at school (Brinkman, Gialamas, & Rahman, 2012; Lamb, Jackson, Walstab, & Huo, 2015).

At a national level, 43% of Indigenous students do not meet the readiness milestones for primary school compared to 20% of the non-Indigenous cohort (Lamb et al., 2015). Preschool participation for Australian children has been found to have a significant impact on subsequent academic achievement, as measured by national standardised tests (Warren & Haisken-Denew, 2013). The lower rates of preschool participation for educationally disadvantaged groups are therefore likely to limit their ability to capitalise on the educational opportunities offered by the system at later stages of learning (Lamb et al., 2015). Living in the lowest SES group is the single most influential risk factor of those considered in this model (Lamb et al., 2015; Liddell et al., 2011). Child developmental gaps have been shown to emerge early, widen between the ages of 2 and 3, and persist throughout the life course. Children of financially disadvantaged families do not start school on an equal footing with their more affluent peers, placing them on a trajectory for lower school achievement and poorer health and well-being outcomes that are difficult to alter (Brooks-Gunn, Fuligni, & Berlin, 2003, cited in Liddell et al., 2011).

In addition to these broader considerations, a key challenge for Gippsland is the availability of suitably qualified staff to work in early childhood education and child-care services within the region (Australian Government, 2013). Therefore, increasing the number of Aboriginal and Torres Strait Islander educators is a key factor in fostering student engagement and improving educational outcomes (Buckskin, 2016). Of great significance is the fact that the 4200 registered early childhood teachers in Victoria, only 16 were identified as having an Aboriginal heritage (Weuffen, Cahir, & Pickford, 2016).

Strengthening Young Koorie Children's Resilience: Supporting Educational Success

Early childhood educators can support Koorie children and families in fostering a strength-based focus upon their cultural context and encourage families to seek out and draw upon cultural support networks. The updated Victorian Early Years Learning and Development Framework (VEYLDF) (Victorian Government Department of Education and Training, 2016a) presents a stronger focus on Aboriginal families and children than the previous edition, reinforcing the importance of all Victorian

early childhood educators and the children they educate in understanding, respecting and embracing Aboriginal culture. By way of example, the VEYLDF states: 'For Aboriginal and Torres Strait Islander children, connections to country, including through learning on country in the natural world, support identity' (VEYLDF, 2016a, p. 9), accentuating the importance of educators seeking cultural knowledge through the families and communities of aboriginal children to enable cultural competence. Embedded within the VEYLDF is the idea that resilience, identity and confidence are enhanced when Aboriginal culture is appreciated.

However, whilst the VEYLDF advocates for cultural competence and the promotion of fairness and amicable relationships that respect diversity, the framework does not instigate reflection and dialogue about power relationships, issues of possible conflict or biased attitudes. Perhaps then, practice that deeply strengthens identity and resilience may be limited in the operationalisation of this particular framework.

Koorie Voices from Early Childhood Education in Gippsland: Emergent Findings and Discussion

As FUGuE researchers, we were interested in examining how Koorie families were accessing and engaging with early childhood services in Gippsland. Unlike other qualitative research approaches that employ pseudonyms for the purpose of participant confidentiality, we have deliberately used actual participant names to represent their perspectives. We see this particular research practice as a way of bringing authentic voice into this previously unexamined context. Such transparency is an underpinning facet of FUGuE that explicitly acknowledges the contributions of the wider community who we research with, and on behalf of. The emergent findings have been categorised into the following themes: building relationships and resilience, cultural responsivity and inclusion, childcare–kindergarten–school transition, challenges in early childhood education for Koorie families, and hopes and aspirations of early childhood educators.

Building Relationships and Resilience

Supportive, trusting and non-judgmental relationships were fundamental to engaging Koorie families and indeed to sustaining engagement within services. The Home Interaction Program for Parents and Youngsters (HIPPY) delivered by the Brotherhood of St. Laurence in Morwell builds strong relationships between Koorie tutors and families. The regional township of Morwell is located in the heart of the coal mining community of the Latrobe Valley and is characterised by higher levels of socio-economic disadvantage. The median age for Koorie people is 18 years. Within HIPPY, tutors work with families as peers and understand the unique and some-

times complex situations families experience, offering social and emotional support as well as educational opportunities designed to be integrated into the family's daily life. Koorie tutors often visit parents in their own homes on a weekly or fortnightly basis, which fosters comfortable and safe relationships, as well as ongoing communication. Across several centres, location visits were flexible, sometimes occurring in local parks or children's centres.

Located in remote East Gippsland, the small community at Nowa Nowa similarly provides play-based early childhood education to the Koorie children of the Lake Tyers Aboriginal Trust.[1] comments from the Director Rachel Webb point towards the ways the kindergarten has built its reputation on trust. She told us:

> This service has been here for many, many years and a lot of the families have actually attended here themselves so yeah, they've been here as children, so their children come here and it's kind of like they already have a connection before their children come here.

Other participants similarly emphasised the crucial nature of a welcoming, respectful and non-judgmental environment. By way of example, Michelle Went, Manager of Gunai Lidj (a multifunctional Aboriginal centre in Morwell offering long day care/before and after school/school holiday programme and monthly maternal health appointments for families), suggested that 'Being genuine, patient and respectful' with families was a critical dimension of maintaining relationships. Corresponding to the Nowa Nowa example above, Michelle explained how resilient relationships took time to develop, but once established, tended to successfully foster engagement between the service provider and families. This theme was highlighted by Barbara Hunt at Djillay Lidji, a centre in Morwell and in Drouin (West Gippsland) that brings Koorie parents and their children together each week in a structured and safe socialising environment. In reference to the vital nature of establishing and maintaining respectful relationships, Barbara explained:

> I think the main thing for early childhood educators working with Koorie families is building trust with them and maintaining that trust. You can't just once you've got that trust go yep I've got it and it doesn't matter anymore. You've got to maintain it and work continually. A lot of indigenous families are very wary of people in authority in general I think because of past things that have happened that shouldn't have happened. I suppose that's just my personal opinion. It depends a lot on each family, if they feel they're not being made welcome, they're reluctant to go back to a centre. A lot of families find it very hard to share information with teachers and we really do need families to share information, so we can provide the best possible programme for the children and provide support if needed.

Barbara's perspective for building and maintaining trust is an important reminder of the ripple effect of past (negative and destructive) events that continue to impact current generations. On this note, the imperative to strengthen family–teacher relations appeared to be a vital ingredient for generating trust.

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[1]Originally, the land of the Gunaikurnai people, Lake Tyers became home to Indigenous people from all over the state who were forcibly removed from their homelands. Many years later, some of these same families were forced to leave the mission and 'assimilate' into townships. In 1970, Bung Yarnda (Lake Tyers) was handed back to the people, many of whom still call Lake Tyers home http://laketyersaboriginaltrust.com.au/.

Further insights into the significance of building relationships and resilience were noted through the role of formal and informal grass roots networks within the Koorie community. As illustrated in the following comment from Aunty Vera Briggs, a highly respected member within the Koorie community and leader in the Morwell Local Aboriginal Education Consultative Groups (LAECGs), increased participation of families engaging with services was largely due to the unique communication channels within Koorie communities.

> I really feel that we've got early childhood in our region down to a fine art and you've only got to look at our stats of early years to see how many children we have in the 3–4-year-old kindergarten groups. And, I believe that's from the way in which we work as Koorie people. We're very much a team.

The reference to robust enrolment numbers is an indication of the gains being made in early childhood attendance, which we were told, were occurring as a direct consequence of committed communication with Koorie families.

According to Amanda Thomas, community involvement in HIPPY generates trust and positive community advocacy for the programme. She highlighted how kindergartens and childcare centres often referred families to the programme. In this sense, word of mouth was cited as an influential factor in attracting new families to the programme, and to bolstering the success of the programme and its Koorie leaders. Central to this process, programme coordinators and tutors are recruited from the local community, taking on roles of responsibility as knowledgeable and skilled educators who have a nuanced understanding of community issues, and who belong to wider networks. The significance of strong community networks and how they work across sectors to strengthen educational outcomes for children and the Koorie community was highlighted as a vital ingredient for building Koorie confidence in understanding the benefits of Koorie-influenced programmes. For example, in reference to Aunty Lyn Solomon-Dent, a Koorie Engagement Support Officer at Orbost in remote east Gippsland, Rachel Webb told us:

> Aunty Lyn started coming into kinder and teaching us some songs; some Aboriginal songs, to work with the children and then we actually went to Orbost because she's not from this area. She works out of Orbost and we actually took the children to perform their little concert of their Indigenous songs at the Orbost High School, and that was really lovely for us and it's a way of displaying partnerships with the community and how important it is and what the children can learn from them.

Examples such as this are testament to the ways Koorie networks, expertise and knowledge are utilised to enable broader educational participation in the early childhood sector, which we were led to believe, are having a direct impact on establishing sustained Koorie-wide participation.

Cultural Responsivity and Inclusion

The importance of cultural responsivity and inclusion emerged as another considerable finding within the study, particularly in relation to impacting family engagement

with early childhood services. A culturally inclusive curriculum was highlighted as critical in order for families to feel welcome and respected in early childhood settings. In many programmes, learning resources had been adapted to ensure the cultural responsivity and inclusivity of Koorie family's interests and needs. The bush kindergarten programme at Nowa Nowa was a good example of how programmes were designed to embrace cultural heritage, and to subsequently increase family attendance. The programme leader Rachel Webb explained:

> So we started bush kinder, dancing at the trust, we would meet up with the day care service and take our children down and go exploring and you know it sort of got to engage with the staff and the other children and while it wasn't exactly ideal for them to you know go outside the service, it was still a great way to establish relationships, which is really important and a little bit of a better understanding of the appreciation for the land. So, we thought that by incorporating bush kinder we'll offer these children something that's probably a little bit more familiar to them; something they can relate to.

Similar endeavours for increasing cultural responsivity were further elucidated by Barbara Hunt at Djillay Lidji who spoke of the various ways the physical learning environment represented Aboriginal culture:

> We have indigenous flags hanging all the time…we have the Aboriginal flag and the Torres Strait Islander flag and the Australian flag all hanging in our window and then we just have as part of our everyday practice we have indigenous resources. We have books we have puzzles. We have other toys games. We have Koorie artefacts hanging up around the room and other indigenous materials. It's all got an indigenous design to it and we made that a part of our everyday practice.

These inclusivity endeavours signify the importance of reinforcing children's culture, while simultaneously immersing them in a stimulating and responsive learning environment that acknowledges Aboriginal heritage.

Other ways early childhood centres are working as sites to support Aboriginal culture were highlighted by Koorie Education Coordinator (KEC) Crystal Bertoli (Moe, Latrobe Valley) who explained that many early childhood services in Gippsland are consulting families about their service needs as a way of developing early childhood offerings. According to her, parental and family inclusion in decision-making had become a valuable approach that promoted family engagement. By way of example, the Nowa Nowa kindergarten family engagement was manifested in a weekly reflection that went home to families as a summary of the children's week and included photos and other information about the service. At this centre, as with other centres, the provision of food (e.g. lunch) was a key feature that supported children's learning as well as their health and well-being.

According to a number of interviewees, the inclusion of paid and voluntary Koorie staff within services played a substantial part in cultural responsivity, with one participant suggesting:

> It's good to have more Koorie people in there doing that sort of stuff with the families and I don't know maybe even a community engagement officer for each centre where they engage with the community bring community into the centre as well (Crystal Bertoli Burgess-Hogg).

Others referred to the impact of cultural responsivity practice that assisted families with financial and other governmental administrative requirements, which was highlighted as an often-overwhelming factor for many Koorie families. We observed an example of this in the Multifunctional Aboriginal centre that provided support for families accessing Centrelink to supplement child fees. We were told the centre informed Koorie families about immunisation records that could be accessed at the Medicare office. In relation to these services, Barbara Hunt highlighted the importance of childcare and kindergarten workers visiting families at home, which allowed them to assist Koorie families with completing various forms. According to her, this was a particularly important element of the services they offered given the low levels of literacy within many Koorie families.

Childcare–Kindergarten–School Transition

The transition for children and families in early childhood services, for example, the transition between childcare–kindergarten–school presented a high-risk context for Koorie families. A most enlightening finding of the research suggested that early childhood services are very aware of this situation, believing their work ameliorated many of the risks associated with ensuring successful transition. In light of these risks, HIPPY offered a home-based, voluntary educational intervention to families for 2 years from when a child is 4–5 years of age, following the child into the crucial first year of formal schooling. HIPPY placed substantial emphasis on preparing children for the transition to, and participation in school, as well as developing positive dispositions to lifelong learning socially, emotionally and academically. Similarly, the Nowa Nowa kindergarten worked closely with the local Aboriginal Trust Childcare Centre, implementing a bush kindergarten experience for children and families. One participant referred to the positive transition to the kindergarten context:

> So, we decided for a bit of a transition process for the children coming from the day care centre to kinder which was always quite daunting like in the past they've had a lot of failures with children transitioning off the Lake Tyers Trust because of the lack of exposure to other services. So, we decided we need was to collaborate and spend more time together. So, we started bush kinder (Rachel Webb).

To combat the at-risk Koorie transition many of the workers acknowledged the need for greater communication amongst educational providers to ensure consistent and continued enrolment for Koorie children. This challenge is explicitly identified in the wider research literature that calls for 'ready' links between school, families and communities which enhance transition (Dockett et al., 2010).

Challenges in Early Childhood Education for Koorie Families

When asked about the challenges to families enrolling children in early childhood, transport was raised by a number of educators. In many towns, families without access to a car needed support to enrol at the nearest kindergarten rather than one of the Koorie services. Even so, access was a challenge, as noted by Crystal Bertoli (Burgess-Hogg) who cited transport as a leading barrier for enrolment. Coupled with the fact that many Koorie families do not drive is the geographical distance that isolates families without transport, from educational and wider services. In response, a bus is used to collect children for kindergarten, as explained by Rachel Webb:

> Where we're situated, we're in a pretty sort of remote location and a lot of our Indigenous families don't have the service available especially out of our Lake Tyers Trust. So, we actually bus our children. We pick up the children from their homes, bring them to kinder where we provide a kindergarten service to assist with school readiness.

As with the Djillay Lidji centre in Morwell, bus transport that involved collecting children from homes contributed significantly to consistent attendance, broadening learning opportunities and enriching cultural programmes for children by going out into the community to visit sites of interest.

Another challenge identified by participants was ensuring available places for Koorie children in kindergartens. Once an issue, this has been more recently addressed to overcome a critical barrier for transient families relocating from one town to another. Zack Haddock from Gippsland (Manager, Koorie Education with the Victorian Department of Education) explained:

> A number of early childhood services hold places for Koorie families that are already pre-booked which means that if families are transient or moved into the area, we're not at risk which we were about five years ago of all the places being booked up and taken and if you move due to your family circumstances you've given up your place.

The issue of children having to establish new relationships with each family move remained a concern for many educators. Disruptive life circumstances and mobility were also identified as one of the difficulties in recruiting tutors and building relationships. And finally, the notion of cheaper and more flexible access to early childhood services was also raised by the participants, one of whom suggested that supported financial access for 3- and 4-year-old kindergarten made a significant difference to a family's attendance.

Hopes and Aspirations of Early Childhood Educators

The last finding identified here is concerned with the hopes and aspirations of early childhood educators around Koorie children being academically and socially ready for school. The benefit of 2 years of kindergarten was increased levels of self-efficacy, which according to Vera Briggs was evident both in the kindergarten and in the subsequent transition to school:

> For the schools to be able to notice the difference in the child and it just makes their learning capacity that much better because they're able to learn and they don't have to show this child anything because that child knows, knows how to read the book and knows … the numbers and the letters of the alphabet because they learn that all in the HIPPY program and at kinder.

Regarding academic success, Vera added her hopes for Koorie children were concerned with them having stronger resilience and social skills to confidently negotiate relationships in schools. Her aspirations for extending children's social competencies were explicit:

> I would like to see them go to school very confidently, go with confidence but also in the playground because they can socialise with other children because they have been able to access three and four-year-old kindergarten and you really notice the difference in the Koorie child when they go to school.

The impact of attending 2 years of kindergarten and the affiliated self-efficacy of children was also acknowledged by Crystal Bertoli:

> For all three-year olds to access early start kinder it's really beneficial. I was sceptical when my daughter done it being a three-year-old she was tiny and as most families you know it's your baby. But since she's now in four-year-old kinder it's amazing, she'd learnt so much, she knows how that centre now runs so she's kind of like a little leader for all the other ones that come in this year.

Although some participants expressed an interest in developing their programmes with Koorie populations in other regions of Gippsland (e.g. the HIPPY program), they felt programmes needed to be fully developed to ensure effective success. Other educators wanted to raise children's self-confidence to ensure their continued education all the way to university or into a trade. Taking a longer term view, many wanted to see Koorie children attend early childhood programmes that prepared them for school and shared culture.

Conclusions: Pathways for Koorie Success and Empowerment

In this chapter, we have attempted to bring to light the previously unheard voices of early childhood educational leaders and carers in the Gippsland Koorie community, who are setting the foundations for a strong and prosperous future for Gunaikurnai children and their families (GLaWAC, 2015). As an under-researched field of study, the collective stories highlighted throughout this chapter bring all of us closer to the realities and the imperatives that face early childhood services and staff who are committed to forging educational pathways for Koorie children and their wider communities. As illustrated by the participating educators and carers throughout this chapter, the educational services and their associated practices they provide are critical to advancing and sustaining the strong and living culture of the Gunaikurnai. As a consequence of this research, and as FUGuE researchers, we have developed greater

cultural awareness of the Koorie community, including a heightened appreciation of the inadequate discourses of disadvantage ascribed to Gippsland Koories.

On a wider scale, a study such as this is a poignant reminder of the enduring impact of historical events that have taken place in Gippsland and which have cast a long shadow on Aboriginal people and their culture. To assist our understanding of how the Gunaikurnai seeks to rebuild and maintain their heritage and culture, Nicholas, a Gunai, Monero Ngarigo and Gunditjmara man who worked on the project, contributed great depth about Indigenous knowledge and viewpoints. In this regard, Sue and Cheryl as non-Aboriginals have been privileged to learn from him. Through his association with more experienced researchers, and as a consequence of conducting the interviews in this project, Nicholas' passion for research has been invigorated. Viewing the significance of the research and interpreting the data through different lenses has, we believe, enriched the research process and findings.

A vital outcome of this research is our aspirations to establish stronger relations between the School of Education at Federation University Australia and the Gunaikurnai community of Gippsland. Like any regional university, our university has an ethical responsibility to collaborate with the wider Gippsland community, and we look forward to future projects that will contribute to finding, strengthening and offering pathways that lead to success and empowerment for Koorie children and their future educational experiences.

The research findings will be returned to the Gippsland Koorie community, hopefully, to be used in decision-making processes, as a significant record of current practice, and for informing future policy and strategies pertaining to the improvement of access and engagement for Koorie communities in Gippsland. We also hope the research will further advance the agency of the Koorie community and generate future innovation and transformation between the Koorie community and early childhood services, who are championing educational achievement in and for Koorie children.

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Chapter 8
'Making Learning Valuable': Transforming My Practice Through a Service-Learning Partnership in Central Gippsland

Linda J. MacGregor

Abstract The transformation of teacher educator practice and the implications for practitioner research for a Federation University Gippsland Education (FUGuE) academic are explored in this chapter. It centres on a 'service-learning' partnership that endeavours to reduce inequality by engaging local pre-service teachers and promoting quality education at the primary and tertiary level, which is a United Nations Sustainable Development Goal to which I respond. This study explores my transformational journey from being involved in such partnership opportunities. Prompted by the particulars of place—in this case, some community needs in central Gippsland—and a school-based service-learning partnership with a philanthropic organisation, I consider how my pedagogy, practice and opportunities for research have been enriched. Using a self-study methodology, I analyse how the project aligned with the six elements of Fink's Significant Learning Framework to provide a detailed description of the learning, the critical nature of academic reflection and the impact on personal growth in relation to my involvement. In addition, my practice is examined by collecting anecdotal data from Pre-service Teachers (PSTs) indicating how they connected theory with practical application. To gain nuanced insights around the impact on the learning of PSTs and the author, the self-study utilised research methods such as recording conversations, critical reflection and anecdotal observations. This collection of data was analysed for emerging themes structured around the theoretical framework. The chapter shares my insights as indicated by the transformation of practice as a reflective practitioner and researcher.

Keywords Service-learning · Pre-service teacher education · Transformation · Self-study · Critical reflection

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Reciprocal Partnerships

This study utilises practitioner research to explore the impact of the developing nature of a partnership upon my practice as an early career teacher educator and researcher. The partnership incorporates the Gippsland Campus of Federation University Australia, a philanthropic organisation, and several local primary schools. The partnership was prompted by the particulars of place—in this case, school and community needs in central Gippsland. Many of the schools involved are in the heart of landlocked Latrobe Valley, one of six local government areas in Gippsland that has an industrial overlay and an Indigenous and non-Indigenous farming heritage. Over the years, the area has experienced a range of environmental impacts including the construction of coal-powered stations and open-cut mines. More recently, this particular Local Government Area (LGA) is experiencing economic restructure post power station closure. The other participating schools are located in an adjoining town originally created as a service centre for local power stations. The privatisation and rationalisation of the power industry, however, has had a negative economic impact on the town, which is now more recognisable as a university town. Although both communities face significant socio-economic and geographical inequalities (Australian Bureau of Statistics, 2016), this partnership endeavours to reduce inequality by engaging local Pre-service Teachers (PSTs) and promoting quality education at the primary and tertiary level (United Nations, 2015).

The philanthropic organisation initially approached the university seeking a partnership in response to the community need to increase volunteer participation in their funded after-school learning programme. The *programme* is designed to support local primary school students from low socio-economic backgrounds and utilises local volunteer tutors who have appropriate skills and knowledge to support the programme's activities; to work with the students to support their literacy, numeracy and social skills. The intention of formalising the partnership was to encourage local PSTs to volunteer in the after-school programme to support both the philanthropic organisation's objectives and local primary school-aged students in need. As the Campus Programme Coordinator for undergraduate teacher education and a relatively new academic when the partnership was being negotiated, I was concerned with how best to ensure the success of the partnership opportunity for all involved.

In 2015, the formal partnership was formed, and in Semester 1, 2016, the initial implementation of the programme commenced with five local primary schools, approximately 100 primary school students and 47 PSTs as tutors. As Campus Coordinator, I was invested in exploring the best way to implement the programme, all the while ensuring that the needs of all parties were met and valued, and that the PSTs gained relevant skills and knowledge from interacting regularly with primary school-aged students.

Although the performance skills of the PSTs closely link to my own understandings and own learning, this self-study predominantly examines my own learning journey to elicit personal transformation points resulting from being involved in and exploring the partnership opportunity. Like Anna's reflections on the impact of being

a critical friend on her researcher identity (see Chap. 7), I was also grappling with my own identity from being involved in this partnership opportunity. Being a part of the FUGuE research team, as an early career researcher and a PhD candidate, provided the opportunity for me to explore both my own as well as our collective contribution to regional research in a supportive environment, and as a result, research my practice.

Formalising the Opportunity: Embedding Service-Learning

The first concern for the partnership was to consider the best way to encourage PSTs to volunteer in the programme. Student volunteering has been defined as 'time willingly given for the common good and without financial gain' (Volunteering Australia, 2015, as cited in Paull et al., 2015, p. 2). A major finding from a recent report (see Paull et al., 2015) found that for student volunteering and learning to be successful, the activity students engage in should be organised, allow student choice, have clear expectations, involve self-reflection and include feedback from the organisation involved. However, previous university efforts to recruit volunteers for career-based opportunities with local schools, such as involvement in reading programmes, had resulted in limited take-up. The findings of the report indicated a more formal approach was required for the programme partnership to engage PSTs and improve their learning outcomes, as well as meet the volunteer numbers required of the programme and the number of students in the local area.

Ensuing discussions occurred between myself and other teacher educators identified that the programme experience could be embedded in and aligned to assessments within compulsory undergraduate teacher education courses. It was hoped that by embedding the programme into a university course, PSTs would see the benefits of volunteering in it, both for meeting learning outcomes, as well as working collaboratively with other PSTs in a supported environment outside formal professional experience placements.

Two courses were identified as appropriate for linking course learning outcomes with the practical application of working with primary students. They were also both designed to evidence Graduate Teacher Standards (Australian Institute for Teaching and School Leadership, 2014). The first was a primary English curriculum second-year course, which focuses on knowing the content and how to teach it. The second course was a first-year course which explores knowing students and how they learn. The programme was seen as a way of providing PSTs with hands-on opportunities to apply the theoretical content of their respective courses. Hands-on learning opportunities are often embedded in educational contexts to strengthen student-centred learning (Beatty, 2010) and promote active citizenship (Howard, 2001). For this study, however, the term *service-learning* is used to signify the intended relationship between the service component, the programme and the course learning outcomes expected from embedding the experience in a university course (Beatty, 2010). Service-learning can be viewed as a pedagogical strategy which directly relates

to 'intentional learning goals … with conscious reflection and critical analysis' (Kendall, 1990, p. 20). In my view, the programme had the potential of providing PSTs with real-life experiences and an opportunity to apply, reflect and connect academic theoretical perspectives.

Rationalising Service-Learning

This self-study occurred during a time of major teacher education renewal that included changes in the preparation of high-quality beginning teachers. The *Action Now: Classroom-Ready Teachers* report (Teacher Education Ministerial Advisory Group [TEMAG], 2014) states that PSTs continue to graduate from teacher education programmes without being 'fully prepared' for the classroom. Furthermore, the Victorian Department of Education and Early Childhood Development (2012) contends that PSTs are not ready to meet the 'demands of today's schools,… communicate with parents, manage classroom activities well and provide effective support and feedback to students' (p. 11). The TEMAG (2014) report urges higher education providers to assist PSTs to make more explicit connections between theory and practice stating that 'theory and practice in initial teacher education must be inseparable and mutually reinforced' (p.18) in order to make a difference to student outcomes. Key among the recommendations is the call for stronger partnerships that enable PSTs to integrate theory and practice.

The problem of learning transfer between the theory undertaken in teacher education programmes and the practice in the classroom setting is well known. Korthagen and Kessels (1999), for example, posited that it may be a result of the use of traditional models of knowledge application which assume that what is taught at university will be applied by PSTs when in a classroom environment. What is evident is the continued (mis)belief that a gap between theory and practice exists and that it needs to be bridged. As a researcher, I was interested in whether or not the programme partnership would assist to narrow this gap and how the partnership might assist with my practice and pedagogy as a teacher educator.

The various competence stages that PSTs and beginning teachers progress through have been well documented in the literature (e.g. Caldermead, 1989; Fuller & Brown, 1975; Furlong & Maynard, 1995). Studies such as these provide a continuum conceptualising the variations in beginning teachers' experiences, knowledge and skills. In the current political environment which focuses on student learning and achievement, the TEMAG (2014) report stipulated PSTs should develop through this continuum more quickly so that the focus on student learning emerges earlier. Darling-Hammond and Baratz-Snowden (2005) suggest that this can be achieved through expanding PSTs teaching repertoire, helping them understand which strategies are likely to be useful. It is further argued by Swinkels, Koopman, and Beijaard (2013), that by prioritising what and how students learn, PSTs are more able to effectively adjust curriculum, pedagogy and learning sequencing to cater for individual needs.

The challenge, therefore, is for teacher education to expedite and facilitate PST conceptions of teaching and learning towards a more learning-focused approach (Swinkels et al., 2013). PSTs need to be provided with opportunities to consider what is important to learn and adopt and direct their concerns to the learning needs of the child (Dewey, 1904, as cited in Darling-Hammond & Baratz-Snowden, 2005). According to Darling-Hammond and Baratz-Snowden (2005), teacher educators need to instil reflexive practices that encourage PSTs to diagnose problematic situations, seek solutions and make a change in their own practice as a result.

Significant Academic and Personal Learning

This study uses Fink's (2013) *Taxonomy of Significant Learning* (as shown in Fig. 8.1) as a lens to provide a detailed description of the learning, the critical nature of academic reflection and the impact on personal growth in relation to involvement in the partnership experience. As an early career researcher, I apply Fink's Taxonomy to explore both academic (*foundational knowledge*, *application* and *integration*) and personal (*human dimension, caring* and *learning how to learn*) objectives for designing partnership experiences to enhance PST engagement and academic learning. It is used to guide my critical reflection and to reflect upon my own growth as a teacher educator and researcher from being involved in the service-learning experience.

In-line with TEMAG's (2014) recommendations to prepare classroom-ready teachers, Fink's (2013) taxonomy focuses on significant learning that encourages social interactions, enhances individual lives and develops more informed and active citizens. The six categories, summarised in Fig. 8.1, are described as relational and interactive with multiple categories often occurring concurrently throughout learning experiences. Learning is seen as a change in meaning brought about by critical reflection, which provides opportunities to reconsider previous understandings and ideas and create new meanings or life-long learning (Fink, 2013). This taxonomy provides an analysis of the multiple ways in which significant learning can occur as a result of my involvement in this service-learning project as a '*lasting* change that is *important* in terms of the learner's [my] life' (p. 30).

Reflexive Self-study

As a teacher educator and researcher, I have become increasingly interested in utilising experiential learning opportunities for PSTs to provide unfamiliar, diverse and complex teaching and learning experiences as a way to challenge personal beliefs and support new insights (Anderson, 2000; Scott, 2011). Dewey (1964) urged teachers to be both consumers and producers of knowledge by being reflective and acting upon their reflections. Therefore, throughout the development of the programme partner-

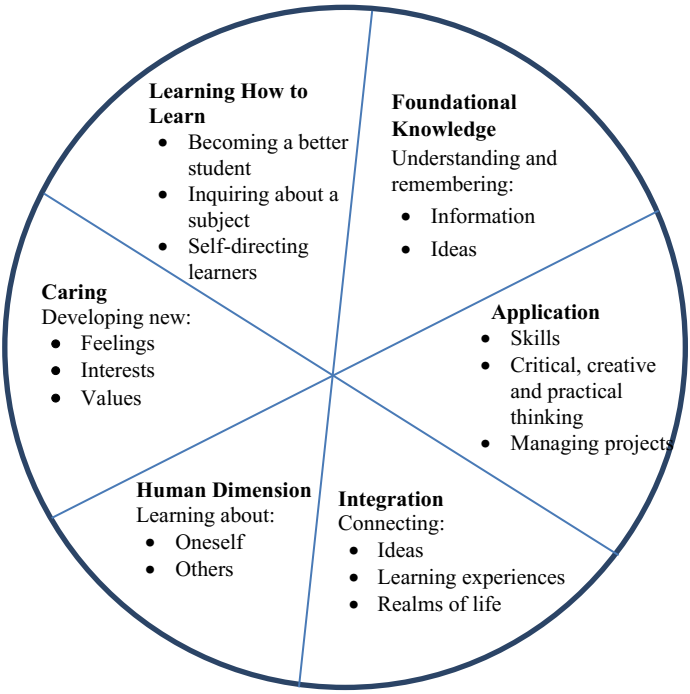

Fig. 8.1 Taxonomy of Significant Learning (Fink, 2013, p. 35)

ship I have reflected upon its impact on the transformation of my practice, research and the resulting impact on the PSTs and the community.

This chapter shares this reflective journey and employs the use of self-study to explore the emerging themes obtained through methods including collecting anecdotal data from PSTs involved in the programme. To gain nuanced insights around the impact on the learning of PSTs and themselves, other methods in-line with self-study methodology such as recording conversations, critical reflection and anecdotal observations are used (LaBoskey, 2004; Schulte, 2009). In-line with practitioner research methodology, my reflective enquiry enables me to better understand my own practice, and as a result, improve the effectiveness of teaching and learning for our PSTs (Shaw & Lunt, 2011). Fox, Martin, and Green (2007) suggest that practitioners who engage in research of their own practice become researchers that are more successful as a result. As noted by Northmore and Hart (2011), the complexities and challenges of being involved in a partnership 'leave little opportunity for critical reflection' (p. 5). As a reflective practitioner, therefore, it is important to take the time to reflect, after all, as Phipps and Zanotti (2011) advocate, the 'journey' is just as important as the 'destination'. Or as London, Zagofsky, Huang, and Saklar (2011) ascertain, 'The sustainability of community-university partnerships is not based on a lack of

mistakes in the relationships, but instead on the ability to build resilience over time and draw strength from responses to the challenges to be overcome' (p. 13).

With this in mind, my journey into becoming a critically reflective teacher educator and researcher explores the following question: What significant learning has resulted for me as a teacher educator and early career researcher?

My Transformational Journey

The Beginning: Reciprocal Partnerships

I vividly recall the feelings of trepidation preparing for the first partnership meeting. As I had only been the Campus Coordinator for a short time, I was still determining the direction I wanted to take for the courses and opportunities that the Gippsland campus could offer our PSTs and how best to respond to the recent TEMAG (2014) report.

The meeting identified a real need within the local community to support the organisation's after-school programme, so PST volunteers were identified as potential tutors in it. The partnership arrangement needed to adhere to the organisation's intended outcome, which was to expand learning opportunities outside of school time for local primary school students. Although there was some flexibility in the way the programme might operate, it was expected the activities run by PST tutors would be underpinned with a literacy and numeracy focus and would include other enrichment activities. Fink (2013) categorises this approach as an understanding of *foundational knowledge* and perspectives, which I realised was important for future partnership decisions and achievements.

School involvement was seen as a crucial component to the success of the partnership. In-line with Brady's (2002) investigation into a school–university partnership, several local primary schools had also expressed their support in being involved, demonstrating their willingness to 'embrace a broad range of partnership activities' (p. 6). Therefore, to ensure the full participation of students, the programme was planned to occur directly after school, utilise school buildings and involve teachers from the school in a supervisory role.

After the meeting, I reviewed the two courses we hoped to embed within the partnership. The main challenge, however, was how best to implement the project in such a way that as many PSTs as possible could participate. As stated by Bringle and Hatcher (1996), these crucial initial implementation decisions required a group of people 'with the appropriate interest, motivation, and skills needed to execute the critical first steps' (p. 225). I was fortunate to have the support from FUGuE course coordinators or lecturers who had expressed an interest in exploring ways to meet TEMAG recommendations and provided me with a research community to be a part of. Fink (2013) sees the managing of complex projects as significant learning,

which includes the application and exploration of how to use knowledge, organise and coordinate the project.

Holland et al. (2003) suggest that best partnership practice requires clear communication, goals and expectations, effective collaboration with all parties and shared planning and power. As this partnership involved diverse stakeholders—multiple schools, a philanthropic organisation, academic staff and PSTs, I soon became aware of its complexity. Searching for a model to guide my approach, I realised a model for best practice in university–community partnerships did not yet exist due to varying local contextual factors (Ostrander & Portney, 2007). Committing to this partnership meant creating a model that worked for all involved, including creating a learning community that enabled the *integration* (Fink, 2013) of different perspectives, connecting diverse people and disciplines through a reciprocal process.

Administrative Challenges

A partnership was agreed to 'in principle' in November 2015, which enabled me to review university administrative and system processes that may affect the success of its inaugural implementation in 2016. It also provided an opportunity for the Organisation to approach schools and advertise the opportunity to the primary students and their families.

There were several key challenges evident in relation to managing the university's role in the partnership. First, in terms of scheduling, there was the issue of how to ensure that as many PSTs were available to participate in the programme without negatively impacting their study, extracurricular and work commitments. Second, how would we promote the programme and raise its profile as a worthwhile opportunity? Third, what ways could this opportunity be linked to course assessments and content to ensure PSTs saw the relevance of being involved? Finally, how might the programme partnership be implemented to accommodate all the different parties?

Although I knew that by looking at each of these challenges as separate entities, I could draw on my own initiative, experience and be decisive, I soon realised that impending decisions would have a greater impact on the academic nature of learning for this campus as well as on myself as an educator. Several elements of Fink's (2013) taxonomy became pivotal at this point in my journey; that of the *human dimension*, *caring* and *application*. Upon reflection, each of these played a role in the decisions that were made for the first implementation of the programme, which I now discuss.

Human Dimension: In my practice as an educator, I was considering what was important to me, made more poignant as a new understanding of myself was forming as the Campus Coordinator and what I had hoped to become. The more I delved into the initial administration required to set up the programme, the more confident I became in my abilities to do something that was important to me. In essence, I was discovering the 'human significance of what [I was] learning' (Fink, 2013, p. 36). I was learning how to become an effective leader and how to contribute to the work of a team as well as part of my local community.

Caring: Significant learning involves a change in the way in which someone cares about something (Fink, 2013). I had always cared about the learning outcomes of students I have taught, both as a primary school teacher and more recently as a teacher educator. However, I found that this partnership opportunity changed the way I cared about how PSTs were learning. Previously, I had predominantly focused on the individual course learning outcomes for PSTs, and now I was looking at a far bigger picture. I was caring about the kind of teachers they would become and as a result, I was investing a lot of energy into ensuring that the partnership would impact positively on the PST's journey of becoming teachers.

Application: During the planning stage, I engaged in different kinds of thinking: critical, creative and practical thinking (Fink, 2013). I had to analyse previous unsuccessful opportunities for volunteering and evaluate what I could take from this to inform this partnership. As a result, new ideas had to be created and imagined in order to fit with the new context. For example, creating a 'prac' class within the student timetabling system to ensure that other courses did not clash and carving out time for the PSTs, in their often busy lives, to participate and ensure they could commit to the weekly time requirement. Practical thinking occurred too when I considered what decisions would be effective in practice as well as align with the programme's intentions. This was a chance to benchmark PST expectations and to scaffold their learning through the provision of training sessions and school induction visits. In recognising that PSTs could be absent due to a range of reasons, such as ill health or work commitments, we implemented a ratio of two PST tutors to four primary students to ensure any absence that occurred still meant the programme session could continue and the primary students had consistency in their tutors.

Jumping In: The First Semester of Implementation

Prior to the beginning of the first semester of implementation, all students enrolled in the aligned course were provided with an overview of the programme and were encouraged to sign up to one of the four schools involved. The initial feedback from the PSTs was that they were 'excited about participating in this aspect of the course' (PST email, 19/2/16). Following their first preparatory session, they also demonstrated that they were keen to be involved and work closely with primary students on a regular basis.

Despite everyone's best efforts to prepare for our first semester of the programme, however, it did not start as smoothly as hoped. A week before the programme was to commence the organisation notified us that the PST's Working with Children's Check, which all Victorian PSTs were required to have for their professional placement, would no longer be adequate. Instead, the organisation's commitment to their Child Protection Framework meant that a national police check was now required. Although this delayed the commencement of the programme, the identification of this extra requirement enabled me and the PSTs to learn more about the children involved in the programme. In-line with Fink's (2013) *Human Dimension,* we were

able to gain a greater appreciation of the need for confidentiality, student safety concerns as well as a new understanding of how to interact with others.

During the semester, the lecturers and myself teaching in the course, supported the PSTs by visiting the schools frequently and checking on PST progress during tutorials. At the conclusion of the semester, a survey of PSTs involved in the programme was conducted to explore aspects of how their involvement contributed to their own learning in the course and the development of other key employability skills such as planning and teamwork. The results indicated that whilst the majority of the PSTs (57%) found the experience helpful, many were unable to identify how their volunteering helped them develop particular skills or how it supported their learning in the course. PST comments demonstrated a concern over the lack of alignment with the course assessment and learning outcomes, with some PSTs asking for further clarification on how they connected.

Upon reflection, Fink's (2013) Taxonomy provided me with the identification of two crucial elements that were impacting on the PST's learning and my practice as a teacher educator: the lack of *integration* of academic work and aspects of *learning how to learn*. It had been assumed that the PSTs would easily be able to make the link between the course learning outcomes with working regularly with a student. The aim was that they could obtain a writing sample early on the piece and use this to plan a sequence of activities to support that student and analyse it for their assessment. However, as one PST commented, 'I wasn't really aware that it related to the second assignment until later on' (Anonymous PST Survey Response, 25/5/16). It was clear that we were not being explicit enough in our instructions and the connections we had expected the PSTs would make. Another PST commented, 'I think it was a good experience but did not completely engage with the learning outcomes' (Anonymous PST Survey Response, 25/5/16). PSTs needed to be supported to become self-directed learners and understand how to apply new knowledge gained from the theoretical aspects of the course to the practical nature of the programme. For future programme opportunities, I realised the importance of making clear and explicit connections between the service-learning experience and both the course learning outcomes as well as the assessments.

Taking this new knowledge into Semester 2, 2016 was particularly crucial as the PSTs involved would be first-year students with less foundation knowledge and experience working with primary school-aged students. This time the programme was embedded into the assessment outline and rubric from the beginning of the semester. Reflection opportunities in tutorials were increased and informal links between weekly course themes and the students in the programme were discussed. PST survey responses indicated an increase in the contribution of the programme to their learning in the course (65%). Whilst some PSTs still 'disagreed' that the programme complemented the course, unlike the previous semester no PSTs 'strongly disagreed' with this statement. For this group of PSTs, their concerns were more focused on the time and effort associated with planning and working as a group to ensure the success of the programme. Comments such as 'Whilst [the Programme] was great it takes a great deal of time' and 'I wish my group was more focused on prep time and communication' provided further information about the struggles they

were facing. It was clear there were still areas for improvement required to support our PSTs with both the cognitive and workload involved.

Grounding Practice in Research: Learning How to Learn

In early 2017, it became apparent just how much I had become involved in the partnership, and how much I cared for the impact it was making on the PSTs and the learning culture of the Gippsland Campus. A collegial discussion between FUGuE researchers and myself highlighted my desire to investigate this partnership further and explore the learning our PSTs were gaining from being involved in the programme.

Interested in finding ways to improve the PST's connections between course learning outcomes and their experience with the programme, I commenced a literature review surrounding community service and university partnerships. In essence, I was exploring Fink's (2013) sixth kind of significant learning: *Learning How to Learn*. A major shift was occurring for me during this time. I had recognised the importance for myself to become a better research student and academic by engaging in more self-regulated learning on a topic that I cared about. New knowledge needed to be explored to develop my understanding through a deep analysis of the existing literature. I was setting a learning agenda for myself and 'becoming an intentional learner' (Fink, 2013, p. 41) whilst, in hindsight, unintentionally beginning my journey of becoming a researcher.

This research had an immense impact on my foundational knowledge around partnerships and how to improve theory–practice connections for students in the higher education context. Within the Australian higher education context, university partnerships opportunities have largely been generalised as Work-Integrated Learning (WIL) (Harvey, Coulson, & McMaugh, 2016). WIL is an encompassing term used to describe a pedagogy that aims to prepare work-ready graduates through the integration of theory and practice and carefully designed curriculum (Patrick et al., 2009). For me, one category of WIL stood out from the others. 'Service-learning', was I realised, what I had been trying to achieve with the partnership. As a model, service-learning seeks to streamline community service, research, learning and student outcome priorities (Butin, 2003; Langworthy, 2007) and immerses students in real-life experiences by providing them with the opportunity to apply, reflect and connect academic concepts and perspectives learnt in their university studies (Anderson, Swick, & Yff, 2001).

As there is an emphasis on reflection and extending content knowledge, the model compliments current implementation of reflection, which has been increasingly incorporated into teacher education programmes (Anderson, Swick, & Yff, 2001; Ash & Clayton, 2004). Indeed, McLeod (2002) suggests that a formal approach to community service in the form of service-learning has the opportunity to provide PSTs with a better understanding of their students, their communities and develop the wide skills required for the profession. By grounding my practice in service-

learning I found myself with a renewed agenda as an emerging researcher, eager to consider how viewing the partnership through a service lens would further build the capacity and learning outcomes of our PSTs.

Reflecting on Practice

During the first half of 2017, whilst engaging in service-learning literature I worked closely another FUGuE researcher and the course coordinator, Dr Anna Fletcher, to modify the course learning materials and assessments based on the recommendations from the service-learning literature. This was a period where many of Fink's (2013) significant learning occurred and indeed interplayed throughout the further development of the first year embedded course.

In April, Anna and I met to reflect on the impact the service-learning partnership had had on our PSTs as well as ourselves as teacher educators. We used Fink's (2013) taxonomy to guide our discussion. Initially, our discussion focused on the purpose of embedding a service-learning opportunity and considered which elements of Fink's Taxonomy we were hoping to achieve by embedding service-learning in a course. Our discussion highlighted that whilst PSTs learning outcomes were a crucial focus for us, we were also 'hoping to become better teachers by doing this experience' (Anna). We recognised the need to link 'what we are doing theoretically in the classroom with … what they are doing in the future by making sure that what we are teaching at Uni can be related to real-world experience … therefore making learning valuable' (Linda). This revealed a desire to not only improve our PST's practice, but also our own. In effect, our discussion had identified aspects of *Integration* (Fink, 2013) through the realisation that we have developed a learning community aimed at connecting university life with the lived experience and helping PSTs to make connections.

Our conversation highlighted the importance of service-learning as a way to ground our practice as reflective practitioners in 'real-world experience' as given below:

> *Anna*: We're integrating through people, through our different knowledge and our experiences. I think we are actually integrating this within this process and using the course that we are teaching, and using [the Organisation] and the whole set up and the planning and working around that. We're integrating our own intentions and our experiences. I mean, I am learning from you, when I hear you speak so…. there's a richness there.

The opportunity to engage in professional conversations around service-learning enabled me to recognise my developing skill at autodidaxy and the intentionality of becoming an intentional learner, which Fink (2013) categories as *Learning How to Learn* (Fink, 2013).

The following excerpt demonstrates how we encourage our PSTs to engage in both critical and practical thinking, which according to Fink (2013) is an important aspect of significant learning through the *Application* dimension.

Anna: So, it does become an understanding of ideas and information for us as well. We get a richer understanding of what they pick up or what they don't pick up as pre-service teachers through this partnership.

Linda: [Tutorial conversations] brought up opportunities for us to link back to the theories about ecological learning and being able to … understand where they are coming from and how it is situated inside a big ecosystem.

As highlighted, here, the opportunities for reflective discussions in tutorials were providing the students with opportunities to analyse and critique situations (*Application*) as well as connect to the *foundational knowledge* the University course was covering.

For us as teacher educators, these tutorial discussions also provided opportunities for identifying the needs of our pre-service teachers:

Anna: So, for us as teacher educators this prompts point of need teaching. And for the pre-service teachers the experience kind of prompts them—'I hadn't thought of that'. Although they probably don't think of that until we question them.

Which emphasised that teaching at the point of need enabled us as educators to explore the *human dimension* (Fink, 2013) of the service-learning experience with our PSTs. Our class discussions encouraged the PSTs to become culturally sensitive and unpack their responses critically utilising the theoretical lenses explored in the course. The service-learning literature (Eyler, Giles, & Schmiede, 1996) highlights reflection as a critical element for learning in a higher education context as it enables them to 'recapture their experience, think about it, mull it over, and evaluate it' (Boud, Keogh, & Walker, 1985, p. 19). In our discussion, we reflected on the important role that providing PSTs with scaffolded reflection opportunities had:

Linda: And with the way it is set up now when they are doing reflections in their tutorials—by us hearing them reflecting and making connections—it gives us a chance to engage with them and make those connections at a timely basis.

In essence, what we realised is that we were engaging in formative assessment to inform our teaching and learning by scaffolding and prompting *foundational knowledge*. Jacoby (1996) suggests these reflection opportunities enable PSTs to extract knowledge from their experience and connect their experience with learning. In effect, it builds on PSTs *Foundational Knowledge* (Fink, 2013) through development of a full understanding of the concepts involved. My conversation with Anna identified that through reflection PST 'thinking becomes more complex' (Linda) and they are 'developing a more nuanced understanding' (Anna).

For us as teacher educators, our reflective discussion highlighted the importance of authentic assessment practices, which encourage PSTs to inquire and construct knowledge (*Learning How to Learn*), whilst also considering the self-authorship (*Human Dimension)* required to take responsibility for their learning of the concepts associated with the course (*Foundational Knowledge).* When creating the assessment for the embedded course, we focused heavily on making sure that the application part—the actual assignments—they do are authentic. Our discussion revealed why this was so important for us as teacher educators:

Anna: And from my point of view, the application that's manifested or demonstrated in this assignment is where I see whether or not they have actually got their heads around the theories.

Linda: So, this is why the reflection works really well, and this is where we get to see their big assignments to see how well their formative knowledge has been applied.

The realisation that the assessments that were developed to align with the service-learning experience were not only designed for the PSTs to learn from the experience but also as a tool to understand (Harvey et al., 2016).

Transformational Revelations

For me, the most revealing aspect of my conversation with Anna was the transformational impact that the service-learning experience was having. For our PSTs, we realised that they were developing performance skills [a component of Fink's (2013) *Application*], a desire to become a better student or educator [an element of *Caring*] (Fink, 2013), and knowing how to contribute to the work of a team [*Human Dimension*] (Fink, 2013). We noted that the PSTs were 'beginning to understand themselves as teachers, not just students' (Linda), thereby transforming themselves and learning about themselves as students and educators.

Recalling anecdotal conversations with PSTs about their role, a cooperative group member also revealed elements of learning how to be an effective leader and character-building considerations:

Linda: But they are also learning in a social environment with team work. They are also learning about themselves and the variety of other people that they are going to be encountering as future teachers. So, learning about themselves and learning about others happen as a result of being involved in this social environment.

This finding is consistent with service-learning literature which indicates that these experiences develop a student's ability to work collaboratively and improves leadership skills (Eyler, Giles, Stenson, & Gray, 2001; Gonsier-Gerdin & Royce-Davis, 2005). However, for me, it was not until we took the time to reflect on what our PSTs were discussing in tutorials that we were able to see the additional benefits that we had not initially expected.

Our conversation revealed to me what drove the decisions we make as teacher educators: the significant learning aspect of *Caring* (Fink, 2013) about the 'what' and 'why' of our decision-making.

Linda: Well to me I think 'caring' underpins all that…. But isn't it the reason why we do this, because as teacher educators we care about their learning? About the knowledge they are getting? And about making sure it is authentic? And about making sure that that they are out there in the community? To me that has quite a big bearing on everything else. The whole reason we are moving forward in this direction with service-learning is because we care about our pre-service teachers.

Up until now, I had been creating learning experiences without having a solid understanding of what was driving my planning, without fully realising what it was that drove me. As noted by Walker and Gleaves (2016), this discussion highlighted to me that I wanted to 'impart change touching students personally, socially and academically, affecting students' learning in both cognitive and affective domains' (p. 75). Furthermore, as their research suggests, this has implications for my identity as a caring teacher in the higher education environment as it has the potential to actively impact on my academic performance and my ability to act as an agent to help create the necessary caring environment for student success.

> Anna, however also pointed out the transformational impact service-learning had on my identity and my skills as a developing researcher.
>
> *Anna*: But there is also another element of this. If we are thinking about what we are doing right now. We are talking about this as part of your research. So, you're actually transforming yourself from *just* being a teacher educator. I mean you are the one who said, 'why don't we record this conversation?' So, you're actually transforming yourself into someone who is collecting evidence and someone who is researching this. And you are saying that we can't skip that bit in the abstract because it was a theoretical framework. That is not something you would have said if we had not started on your [research].

This was a pivotal moment in my journey: the impact that the partnership and reflective opportunities were having on my identity as both a teacher educator and a researcher.

Making Learning Valuable: The Transformative Impact

My service-learning journey has provided many insights into my transformation into becoming a reflective teacher educator and researcher. Through the process of setting up the partnership and the modifications made for each semester of offering, many significant learning opportunities arose which impacted on both my identity and educational goals.

I have learnt that the best way to implement a service-learning experience is to care about all the stakeholders involved and be enthusiastic about the opportunities it presents. It is important to ensure that there is a reciprocal nature of learning from and with the service component, and that it aligns closely with the course learning outcomes in which it is embedded. Assessment practices need to be authentic, and provide opportunities for reflection so that myself, as a teacher educator, can support and learn with the PSTs, as well as enable them to make critical connections between the service-learning programme and the theoretical perspectives of the courses.

The most significant learning for me, however, has been the impact that being involved in this service-learning partnership has had on my transformation into becoming an early career researcher. Working alongside other FUGuE researchers has enabled me to understand the importance of learning how to learn and be able to research and assess different knowledge claims to support best teaching practice. Learning in the higher education context cannot happen alone; integrating the

theoretical aspects of university study with communities and different perspectives enhances the learning experiences and PSTs' ability to apply their learning.

As Schulte (2009) stated, 'Transformation *is* a study of self; the benefits of the process can be applied to the method' (p. 55). I no longer see myself as a teacher, but a reflective practitioner and researcher inspired by the opportunities and improvements that can result from researching and reflecting on my practice.

I hope that this chapter highlights for early career researchers and new academics the importance of not only taking the time to critically reflect on their practice, but also exploring the valuable research prospects that are presented from reciprocal partnership within local communities. This opportunity to reflect on my transformational journey emphasises the crucial importance of being part of a supportive research community, such as the FUGuE, with similar hopes and visions, to encourage early career researchers to find their voice and identity.

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Chapter 9
Frog Bogs, Turbines and Biodiversity: Bringing Children's Sustainability Knowledge to Life Through Handmade Artefacts

Monica Green

Abstract Globally, sustainability is a complex and contested term with multiple meanings and interpretations. This chapter highlights research that was undertaken by a FUGuE (Federation University Australia Gippsland) academic who used a participatory arts-based methodology to frame research with Gippsland children involved in sustainability education. The study originated from the author's involvement in the Regional Centre of Expertise in Education for Sustainable Development (known as RCE Gippsland), a global network of formal, non-formal and informal education organisations responsible for the mobilisation of education for sustainable development (ESD). Drawing on RCE Gippsland's inaugural *Sustainable Schools Expo*, an event that supports primary school students to engage in sustainability themes and workshops and share their respective education for sustainability initiatives, the study involved working with children who were keynote Expo speakers. A key innovation of the study was the use of sustainability artefacts created by children, which represented their sustainability learning and knowledge and were used in recorded dialogical conversations. Findings from the study highlight regional children's well-developed views about the state of the world, including their concern for humankind's impact on planetary sustainability and the subsequent decline of ecological systems locally and globally. Further to this, the immersion of regional children in places where they lived and learnt was highlighted as integral to their sustainability knowledge and understanding. The chapter concludes with a discussion about the methodological contributions of the study and its capacity to illustrate the voice of regional children and their place-oriented lifeworlds.

Keywords Children · Regional · Sustainability · Education for sustainable development · Artefacts · Place

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Coming to Know Sustainability: Key Terms, Debates and Ideas

Globally, sustainability is a complex and contested term with multiple meanings and interpretations. In the groundbreaking Brundtland report *Our Common Future* that was initiated by the United Nations World Commission on Environment and Development over four decades ago, sustainability is affiliated with patterns of living that protect the earth and shape the quality of life that the earth is able to give (Brundtland, 1987). The report goes on to define sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (p. 16). Some decades later, the United Nation's Decade of Sustainability (UNESCO, 2005) was designed to advance sustainability as a commonly used term involving a process of learning that considered the long-term futures of the economy, ecology and the equitable development of all communities. Building on these terms, Stephen Sterling defines sustainability as 'the survival, the security, and beyond these, the wellbeing of a whole system' (2010, p. 512).

The urgent need to achieve effective global planetary stewardship has been advanced by numerous international scholars calling for the integration of social, cultural, economic and environmental considerations into our everyday worlds (Griggs et al., 2013). Others illustrate twenty-first-century challenges requiring immediate response to planetary deterioration, including the planet's continuing ability to provide the same accommodating environment that has facilitated human development over the past 10,000 years (Steffen et al., 2011). Such debates sit within Anthropocene scholarship, a robust field of study that refers to a new geological age known as the Anthropocene, a phase of history in which humankind, the earth and natural forces are intertwined, whereby 'the fate of one determines the other' (Zalasiewicz, Williams, Steffen, & Crutzen, 2010, p. 2231). Underpinning this scholarship is human behaviour impact on planet earth, namely, how humans have dramatically altered the physical, chemical and biological properties of the whole planet as a result of the over-consumption of the wealthy and developed regions of the world (Nolet, 2016).

Across broader sustainability discourse are calls for individual and collective action in local and global communities to achieve a sustainable world (Gruenewald & Smith, 2008; United Nations Sustainable Development Goals, 2018). One such approach is Education for Sustainability (EfS), a pedagogical framework designed to equip children and young people with critical questioning and systemic thinking skills that support them to cope with, manage and shape social, economic and ecological conditions characterised by change, uncertainty and risk (Sterling, 2010). Given the unpredictable and unstable future children stand to inherit (Comber, 2013; Duhn, 2012a), it stands to reason that children, including very young children, are supported to develop sophisticated thinking in relation to socio-environmental issues (Davis, 2005), and for the part they play in developing the strategic planning and action required for achieving a more sustainable world.

In parallel to these global considerations, Australia is a recognised leader in sustainability (Nolet, 2009, 2016) as illustrated through key policy documents (Fien, 2001; Henderson & Tilbury, 2004; Tilbury, Coleman, & Garlick, 2005) and Victorian sustainability-based programmes such as *ResourceSmart* (2016). Furthermore, in the Australian curriculum, for example, sustainability is situated as one of three cross-curriculum priorities (Aboriginal and Torres Strait Islander histories and cultures as well as Asia and Australia's engagement with Asia are the other two) and focuses on future-oriented concerns (Australian Curriculum Assessment and Reporting Authority [ACARA], 2018). Broadly speaking, the curriculum is designed to support young people to respect the fragility of ecosystems and to understand their actions have consequences in relation to maintaining the world as a safe place for future generations.

Increasingly, Australian schools are implementing EfS via integrated academic disciplines and through using local everyday places such as school grounds, food gardens, school kitchens, wetlands and other naturalised spaces that support children's deep engagement and long-term commitment to sustainable living practices.

In this regard, many sustainability initiatives in Australian schools are often place-based in that they are determined by the social and ecological characteristics of the places and communities in which they emerge (Green & Somerville, 2014), a notion explored later in the chapter. The reach and scope of place-based sustainability is exemplified across a robust body of literature illustrating the various ways Australian schools and teachers are working directly with local people and places to advance children's sustainability learning (Comber, 2016; Dolan, 2016; Flowers & Chodkiewicz, 2009; Green, 2011; Somerville & Green, 2011, 2015).

Notwithstanding these accomplishments, sustainability education has struggled to establish itself and maintain a profile in Australian schools (Evans, Whitehouse, & Gooch, 2012). The poor delivery of sustainability may have something to do with teacher perceptions of it as a misunderstood stand-alone subject as opposed to a broad integrated concept, as intended by ACARA. A second consideration relates to the challenges faced by many teachers about how best to incorporate sustainability into professional practice. Despite being keen to implement sustainability in Australian schools, teachers not only lack the confidence, skills and knowledge to do so, but often feel ill-equipped to engage students in the wider economic, social, environmental and political elements of sustainability (Kennelly, Taylor, Maxwell, & Serow, 2012). These issues were illuminated in a study that investigated the take up of sustainability as a cross-curriculum priority in Tasmanian primary and secondary schools. In keeping with the wider Australian school-based narrative, the delivery of sustainability curriculum was perceived by many teachers as problematic; viewed largely as an ambiguous subject that was additional to an already overcrowded curriculum (Dyment, Hill, & Emery, 2015).

Researching In/The Region: A Contextual Background

As a Gippsland-based educational researcher with a penchant for capturing how a region understands itself in relation to planetary sustainability, I have spent several years researching the field of sustainability in regional school and community settings. Such opportunities have brought me face to face with diverse and dedicated teachers, activists, organisations, sustainability officers, volunteers and ecologists working across sustainability-related projects in their respective communities. Significantly, the research has generated a new (previously unexamined) understanding of how 'Gippslanders' perceive and engage with sustainability matters such as climate change, waste, agricultural food production, energy, disaster response to unprecedented flood, fire and drought events, land conservation and strained ecological systems and resources.

Although Gippsland is often mistaken as a homogenous region, it has a diverse and complex geodemographic bounded by six local government areas (LGAs), each facing their own set of unique environmental, social, cultural and economic challenges, including rising sea levels, urban development, high unemployment, declining natural resources and other climate change considerations, as well as the shared challenge of transitioning to low-carbon economies (ClimateWorks Australia, 2011). Having grown up in the region, I have my own accumulated 'insider' insights into what makes it tick, including its diversity and challenges, its unique landscapes, politics and sociocultural underbelly. While these perceptions were initially formed during my upbringing in a large catholic family and close-knit neighbourhood on the southern outskirts of the regional township of Morwell, it is my return to the region after a 30-year hiatus (to take up an academic position at the university) that has consolidated and recalibrated a deeper and different understanding of the region.

My regional research commenced in 2010 when my colleague Margaret Somerville and I collaborated with the Gippsland Climate Change Network[1] to collect information about the geographical spread and nature of school and community-based education sustainability initiatives in the region. Using a place-based survey methodology, the 1-year mapping study confirmed Gippsland as highly active in sustainability-oriented endeavours, underpinned by people's hopes and visions for a viable and prosperous future. From this study, we gained an original impression of diverse sustainability initiatives that spanned community-based projects involving gardening and food, conservation, waste and energy practices, as well as comprehensive sustainability strategies and policy across the private and public sector (Somerville & Green, 2013). Building on the study, we later returned to its survey data to explore how school-based sustainability programmes and curriculum was occurring regionally. Having recognised the degree to which primary schools were engaging in sustainability, we investigated how sustainability education was being manifested across eight sustainability-rich Gippsland primary schools via teacher

[1] An incorporated not-for-profit network across government departments and agencies, private businesses, community groups and other organisations, providing information, consultation and facilitation to enable action on climate change across the Gippsland region.

standpoints (Green & Somerville, 2014). The study portrayed sustainability education as an emergent practice constituted in the relationships between teachers, students and community members. Most significantly, we noted the extent to which the materialities of local places, that is, school grounds, parks, gardens, waterways and billabongs featured across this work.

Even though these studies brought to attention new understanding about the region's commitment to sustainability, we noted the invisibility of children's representation in its wider sustainability narrative. This regional omission of children is reflected in wider sustainability debates that identify the lack of children's voice. According to the literature, despite their inherent interest in, and commitment to sustainability, children's opinions and experiences are absent in global contemporary sustainability discourse and policy (Horton, Hadfield-Hill, Christensen, & Kraftl, 2013). In addressing this gap, a third regional study was initiated to capture children's unheard sustainability perspectives.

In keeping with FUGuE tenets and the underlying themes of Chap. 1 of this book including seeking out and making explicit the voice of 'others' (in this case children), this chapter reports on research that sought to capture children's sustainability knowledge and perspectives through dialogical conversations. In what follows, the study context, its participant recruitment process and research design are highlighted. This is followed by a discussion that examines the research data through two overarching themes, (a) children's planetary stewardship, and (b) the role of local places in children's sustainability learning. The chapter concludes with personal reflections and considerations about conducting research with regional children and the challenges ahead for planetary sustainability.

Children and Sustainability in Gippsland

The small-scale study took place in 2015 and involved a cohort of primary-aged children from schools across central Gippsland which spanned three separate local government areas (refer Chap. 1). Given the lack of empirical research about school-based sustainability in Gippsland, the study generated new data about sustainability, which superseded earlier but somewhat limited research identifying Gippsland schools as 'deficient' in the field of education for sustainability (DEECD, 2007).

Like many of their global counterparts, Latrobe Valley children navigate a plethora of complexities as part of understanding who they are, and who they might become through the places they inhabit (Somerville & Green, 2015). This is a particularly valid notion given the major changes and significant regional events such as the recent closure of the Hazelwood power station in 2017 and subsequent loss of over 400 jobs, coupled with the earlier and historic 45-day coal mine fire in 2014 that forced hundreds of Latrobe Valley residents and school children to evacuate their smoke-ridden communities. Unprecedented disaster-related and unexpected occasions such as these are illustrative of the changing and dynamic nature of regional life. Furthermore, they are prudent reminders for communities to prepare for the

unexpected and to engage in ways of thinking and action that build resilience, perseverance and adaption (Peek, 2008). At a time of major transition for a region moving from a carbon-based economy to renewable energy and newly created industries, the poignancy of uncertainty and new beginnings cannot be understated.

On the one hand quintessentially local and on the other hand unambiguously connected to the global world beyond, Latrobe Valley is a living-breathing example of how rural and regional communities are currently challenged to re-envisage the future as something different. As Somerville and Green propose, this is no easy feat:

> Children growing up in the Latrobe Valley negotiate their identity as subject to the multiple forces of globalisation. The processes of economic globalization have had a marked effect on Latrobe Valley communities through the privatization and automation of the power industry. Dominant public storylines of the Latrobe Valley are of socioeconomic disadvantage alongside environmental pollution represented in media images of power stations emitting greenhouse gases. These storylines operate as public pedagogies that not only describe but also produce identities. Young people living in pathologised places are subject to both the real consequences of poverty and disadvantage and the discursive forces that reinforce these dominant storylines (2015, p. 53).

Through the lineage of time and intergenerational legacy, the circumstances in which Latrobe Valley children exist have a direct bearing on their way of being in the world, their sense of identity, security and belonging, including their relationships with local environments and community.

The study coincided with my committee involvement in the Regional Centre of Expertise in Education for Sustainable Development (RCE Gippsland). Established in 2011, represented by government organisations, schools, local shires, industry and other sustainability-based groups, RCE Gippsland belongs to a global network of over 130 RCEs worldwide made up of formal, non-formal and informal education organisations affiliated with the United Nations. RCEs are responsible for the mobilisation of education for sustainable development (ESD) to the regional and local communities in which they exist. By way of example, they translate the global objectives of the United Nations Decade of Sustainable Development, and the United Nations Sustainable Development Goals (UNSDG, 2018) into the context of local communities. More broadly, RCEs support the ambitions of the regions in sustainable living and livelihood, including the pedagogical incorporation of sustainable development into preschool, school and university curriculum.

Even though RCE's worldwide adopt a unique and specific focus (depending on resources, community needs, context, etc.), RCE Gippsland supports sustainability education across the region through its *Sustainable Schools Expo* (SSE) forums (now delivered across four LGAs in 2014, 2016, 2017 and 2018), which have attracted over 1200 students and 100 teachers from over 30 rural and regional primary schools. Designed to provoke and encourage Gippsland children's thinking and action about sustainability, the overarching purpose of the SSE is to showcase children's sustainability learning across school and community networks.

In developing the nature and scope of the study, I liaised with the 2014 SSE sustainability teacher attendees who provided the names of children who participated as keynote presenters. The 16 participants ranged from 8 to 12 years and were enrolled

at Gippsland primary schools with a sustainability curriculum. In the spirit of inclusivity, other children from some of the smaller rural schools were also invited to participate in the study.

A Methodological Process of Discovery

The study's arts/participatory-based methodology was largely inspired by post-disciplinary research approaches that empower researchers to be creative in their approach, including de-centring the human being in order to envisage the human as co-constituted with the more-than-human world (Hultman & Lenz Taguchi, 2010). Such approaches have informed the work of post-humanist researchers (see Malone, 2016; Taylor, Pacinini-Ketchabaw, & Blaise, 2012) who emphasise the vitality and significance of materiality or 'things' (Bennett, 2004, 2010) in children's everyday life environments, including why children carry stones (Rautio, 2013a), and producing spaces for knowing and being (Rautio, 2013b). I have been particularly inspired by Rautio's research that situates children in the research process 'on their terms', and in particular, her method of supplying primary-aged children with a small wooden box in which to place objects of their choosing to explore and express their worlds. Drawing on her approach, my data collection methods involved children creating sustainability artefacts, and included photographs of, and recorded conversations with them about their artefacts.

My initial visits to the participating schools provided an opportunity to present the research project to children, which I explained, focused on their sustainability learning. I shared my idea about them creating a special sustainability object (sustainability artefact) I hoped would assist them to describe and explore their sustainability ideas. A core intention of this and subsequent meetings was also to develop a collaborative and participatory process (Hollinshead, 2010) that enabled me to build rapport with the children and brainstorm artefact ideas together. Across all schools, children and I shared ideas about the possibilities of writing stories, poetry, construction work, photography, drawing and sculpture. At the end of our discussions, I encouraged them to speak with their parents/guardians about their participation in the study, and if their parents consented, to create a sustainability object of their choice over the subsequent weeks. Children were asked to bring their artefact to a follow-up recorded conversation with me at their school. Rather than judge the quality or value of the artefacts, I attempted to view them as important representations of their thoughts and ideas, or as Rautio states, 'as things and doings that mattered' to them (2013b, p. 2). These methodological considerations provided an important opportunity for an interpersonal research practice that supported 'co-creating knowledge' with the children in authentic ways (Hollinshead, 2010). Through this process of discovery, I too shared my own ideas about sustainability in our conversations.

Working with the broader research question: 'What are children's perceptions of sustainability, and how are they enacting it in their everyday lives', interviews were framed by a set of generic questions such as 'what kind of sustainability story

does your object tell'; 'what do you think sustainability means'; 'where do you see sustainability'; and 'how do you learn about sustainability'. I engaged with the children and their artefacts in two ways. First, I used them as an initial conversation-starter (e.g. what have you made here, can you tell me about your object), and second, for encouraging children to expand their ideas and experiences (e.g. can you say more about that [topic], can you give me an example of when/where you learnt about that idea). The 30 min conversations occurred over a 3-month period and were undertaken in spaces provided by teachers such as a classroom, a kitchen restaurant, a spare office, a staff room and an open student lounge. Although the majority of interviews were conducted individually, children who collaborated on an artefact were interviewed together. During the interviews, photographs were taken of the artefacts (with children's consent) and used to match their conversations.

What Does It Mean to Conduct Research with Regional Children?

In line with my earlier research that examined Australian children's school ground sustainability learning (Green, 2011), this study applied similar research processes that maximised children's participation. It did this by recognising them as knowledgeable and active participants (Skivenes & Strandbu, 2006). In challenging traditional and stereotypical assumptions about children (e.g. children as pre-adult becomings), the new childhood studies recognises and promotes children as actors in their own right, with diverse and often divergent opinions and views about their everyday life-worlds (Holloway & Valentine, 2000; Prout, 2005). These shifting considerations of how we attend to children's ways of being and knowing in the world (Duffy, 2015) help to broaden our understanding of who children are and validate their viewpoints and ability to articulate and construct their own unique perspectives, agendas and subjective understandings as active community members (Prosser & Burke, 2008). As Skivenes and Strandbu maintain:

> It is not sufficient that children are invited to participate and can express themselves. Consideration must be given to the ways in which states and adults view children and gain a proper understanding of their opinions, as well as ways in which adults can facilitate their participation (2006, p. 11).

In addition to these broader considerations, the study was an opportunity to create a platform from which to capture the relevance of 'regional [children's] voice and standpoints' (see Chap. 1, p. 5), which, as noted earlier in this chapter had been unrealized prior to the research. Given the children in this study were linked by their involvement at the sustainability Expo where they represented their school, it made sense to connect them back to the event (where they had heard the sustainability stories of other children across the region) and to the other participating children in the study.

The project met university and Department of Education (Victoria) ethical protocols, which included parental/guardian consent on behalf of children. To protect children's confidentiality and identity recorded transcripts were not returned to them or their parents. Additionally, pseudonyms have been used throughout this chapter and other research publications pertaining to the study.

Discovering the Meaning of Sustainability Through Artefact Engagement

A thematic approach (O'Leary, 2014) was used to analyse the data set—transcribed interviews, sustainability artefacts and photographs. The first layer of data analysis was undertaken through making general impression notes recorded throughout the initial reading of the language-based interview transcriptions. The impressions provided a central 'storyline' of participants' practice and sequence of actions (Søndergaard, 2002). The second layer of analysis involved reducing the data and sorting it into various themes or categories of understanding. As this layer of analysis was manual, transcriptions were cut and pasted into relevant piles according to participant words and concepts. During the process, photos of student sustainability artefacts were used to cross reference the frequency of themes and topics identified within the verbal data.

Although initially unsure as to how the children's artefacts would support their research involvement, surprisingly they became *the* vital research ingredient for generating diverse sustainability conversations, topics, themes and initiatives as determined by children. Key among their responses were sustainability matters pertaining to waste (rubbish and recycling), energy (coal-based energy, renewable energy projects, e.g. construction of sustainable homes and gardens and car design), food production and agriculture (gardening, farming, cooking, animals), pollution (air/land/waterways), reusable toys and materials, conservation and biodiversity projects, and diminishing natural resources (timber/paper/coal/air quality).

In the following discussion, two broad themes (a) planetary stewardship: children's hopes and visions, and (b) learning places: emergent sustainability knowledge in and from the local are used to examine children's engagement with sustainability ideas and practice. Due to the limitations of this chapter, only a limited sample of children's artefacts and conversations is highlighted.

Planetary Stewardship: Regional Children's Hopes and Visions

This first theme commences with acknowledging children's well-established ideas about sustainability, including their dispositions of planetary stewardship that encom-

passed a desire for the ethical and responsible use and protection of the natural environment through conservation and other sustainable practices. The theme also speaks to children's articulation of their hopes and vision for a thriving planet. Specifically, the conditions of life on earth, the current health of the planet and the moral imperative to remedy it permeated children's conversations. These themes were typified through their collective reference to pollution (air, water and land), forest depletion, and declining natural resources as summarised by one child's despair about the world 'falling apart'. In suggesting 'we've got to find better ways to use natural resources', one student expressed her thoughts in the following poem:

> We need to keep the planet clean so let's all do our part
> We can use less gasoline now that will be a start
> Instead of driving cars to school we could walk or ride
> And to really keep the planet cool we could dry our clothes outside
> This is our earth, our planet and home so let's all take a stand
> Please listen to my heartfelt poem and make these changes hand in hand (Louise, 10 years old).

Children's consistent reference to planet earth included collective concern for the plight of the earth and was often accompanied by recommendations for protective action. Their multiple references to 'earth' unambiguously coalesced with their interpretation of the current state of the earth, namely, in relation to its vulnerability and vitality (Griggs et al., 2013). Children articulated a desire to 'keep the world healthy' and to 'keep the world going'. Global threats to its longevity were named, as exemplified through their descriptions of 'a big hole in the ozone layer', 'earth becoming gassy', 'earth being under a lot of pressure' and 'the earth is getting hotter'. In accordance with Anthropocene scholarship that emphasises the (negative) impact of natural-human forces entanglement (Steffen et al., 2011; Zalasiewicz et al., 2010), children identified human behaviour as a fundamental factor in planet degradation, as evidenced by two children who told me: 'I don't think there's ever going to be a future because everyone's ruining the earth', and 'if there's no sustainability our future will get wrecked'.

Evidence of children's focus on planetary sustainability can be understood through their various references to earth. In their eyes:

> E is for **earth**; it's where we live
> We learn sustainability to help the whole **earth**
> We need to make the **earth** less gassy
> Sustainability means we have the ability to sustain the **earth**
> The **earth** keeps moving around so we can breathe
> Every animal has a purpose on the **earth**
> If we share knowledge, it's going to help the **earth**.

Further to these insights, three-dimensional constructions of sustainable homes and gardens (see Fig. 9.1) were created by three other children, each exploring ideas and concepts about living lightly on the planet through energy-efficient home design,

Fig. 9.1 Sustainable home and gardens

self-sufficient edible gardens, water harvesting, solar and photovoltaic panels and house orientation. When asked about the origins of their ideas, children unfailingly referred to lived experiences with their family, including home life and time spent with grandparents and/or in school environments.

Notions of planetary stewardship also emerged from children's reference to the importance of caring for the more-than-human world. By way of example, encounters with non-human life forms featured extensively in their stories about every day 'entanglements with living things' (Duhn, 2012b), including their interactions with plants, trees, worms, soil, bodies of water, frogs, birds, insects and farm animals. Some children believed their sustainability learning encouraged them 'to be kind and respect the places we live in', suggesting 'things might just get worse if we don't. Like there'll be no land, no animals, not much trees, just all buildings and roads and cars'. The significance of these local settings for the development of children's sustainability learning and action is a key finding within the study and examined in greater detail in the following theme.

The links children made between humans and the state of the earth were highlighted in a life-size earth artefact (see Fig. 9.2) created by one of the participants who glued blue and green tissue paper to a large rubber ball to symbolise oceans and continents. Sticky-taped to the globe were photos of frogs, birds and gardens, and circling the globe's lower section was a sign that read 'SUSTAINABILITY: help us

Fig. 9.2 Local and global sustainability

follow the right path'. In referring to her aspirations to 'live in healthy places with clean air', the student used the model to articulate her sustainability ideas:

> This is earth. It's a globe of photos connected by this pathway where everything is connected. I think sustainability means keeping the world going, so going through all the steps and keeping it healthy. So, we've got to do different things to keep it healthy, so we can live in it. This globe is saying everything we do is going to keep our world healthy (Kara, 10 years old).

Kara's ambition to 'live in a healthy environment' was centrally connected to the notorious 45-day Hazelwood coalmine fire (February 2014) approximately 2 kilometres from her school, which forced many residents (at least those who were able) to vacate the regional township of Morwell. Among a substantial set of accumulated consequences, the fire prompted the 2-month closure of Kara's school, which involved daily bus transportation of the whole school community to other nearby schools. Frightened by the thick toxic smoke and snow-like black ash that covered streetscapes, buildings and outlying farming areas for weeks, Kara explained she had 'never experienced anything that like before': she was worried about 'when the fire would stop' and challenged by the unfamiliar and confronting experience of 'breathing through a mask'.

Kara's account brings to light the importance of understanding how regional disaster events not only impact the wider region, but how indeed children's experience

of such events might be acknowledged, addressed and included in wider sustainability discourse (Horton et al., 2013). Having personally experienced and shared my own (somewhat less) inconvenience of the fire with Kara, for instance, the closed freeway and numerous back roads denying me access to university, the accumulative inch-thick sooty-black window sills outside my office, and windows that needed to be kept closed to keep out the excessive smog and stench, I was struck by the way Kara connected the fire to the concept of sustainability. Her story is an important reminder of the vulnerability and fear children experienced during this particular disaster, flagging the importance of hearing their accounts, and supporting them to become resilient or to 'bounce back' in the face of such stressful events (Chawla, Keena, Pevec, & Stanley, 2014; Peek, 2008).

Regional Learning Places: Emergent Sustainability Knowledge in and from the Local

This second theme accentuates the significance of educational settings in children's sustainability learning, shedding light on how such learning is anchored in everyday built and natural places such as local parklands, school grounds, family homes, farms and backyards through embodied encounters. These diverse sites of interaction illustrate how place can exert a powerful and affective influence on children (Comber, 2013; Duffy, 2015; Somerville & Green, 2015). From their explanations, we see how sustainability action involved engagement in everyday places, e.g. gardening in school grounds, harvesting and cooking food grown by children, seed propagation, school ground conservation projects such as establishing frog bogs, and looking after farm animals. The children's examples are also important for understanding how teachers engage in curriculum- and place-making opportunities that draw on the pedagogical capacity of local places (Green, 2011; Gruenewald & Smith, 2008; Renshaw & Tooth, 2018).

Along similar lines, children's stories were imbued with intimate knowledge about the places they created, studied and cared for (see Figs. 9.3 and 9.4). By way of example, children referred to an inquiry-based sustainability project involving the refurbishment of a school ground frog bog as part of term-long (weekly) sustainability lessons, and from other children, their investigations into the activity of macro-invertebrates in a community wetland (walking distance from school). In relation to the first example, one student explained:

> Our whole group was researching about the frog bog on like different plants. We cleaned it all up and we put new flowers in and we fixed up all the water, and then we went on an excursion to the wetlands and we asked if we could take home a big tub and we put some water and [tadpole] eggs in it and now there are frogs. I learnt more from actually rebuilding the bog than I would from just listening. I love that bog (Sarah, 11 years old).

In this particular description, the bog's materiality—flowers, water, tub, plants, eggs and frogs—connect children to its meaning and function, centrally engaging

Fig. 9.3 Monitoring wetland ecology

Fig. 9.4 Refurbished frog bog

them in deep learning about that specific place (Mannion & Lynch, 2016). In the second example, children named their local wetland and its more-than-human features, e.g. micro-invertebrates, insects, bugs, trees and grasses as a way of understanding the wetland's ecological health, which according to them, involved caring for 'food chains', 'food plants', and 'habitats', as described by an older student:

> I've learnt a lot more about habitats and how important they are. I've learnt new words about bugs, habitat, and biodiversity and stuff. If you find a bug you don't know, you can see if it's endangered or anything. We can find out where they live or if they need to be transferred to a better place. I like seeing lots of wildlife because that means like it's healthy because we've been looking after it (Jamie, 12 years old).

In further examples of how children engaged with inquiry-based investigations in local places, older students from a smaller school paired up to produce an acrostic poem that drew on the particularities of their patch, a farming community located between nearby mountains and a coal-based power station. Using the word 'sustainability' to frame their poem, they fleshed out a number of key themes that informed our ensuing conversation:

Solutions
Usable
Support
Turbines
Analysis
Innovative thinking
Natural
Allowable
Balance
Including new and creative ideas
Life quality
Improve
Thinking
Yard sharing (Jill, 11 years old; Ben 12 years old).

When I asked the children to elaborate on the meaning of the word 'solutions', one described it as 'taking action to fix a problem' and used recently installed photovoltaic solar panels on his family home to make links between renewable (solar) energy and coal-fired energy. He explained to me that:

> By using the energy of the sun, you don't have to buy it off companies because you give some of the energy to the companies and they store it and they give you money back for that energy. Solar energy saves the power station digging up the coal and making it into electricity (Ben, 12 years old).

After inquiring about the word 'turbines', the other student Jill described a recent excursion to the nearby Loy Yang coal-fired power station where they were told 'brown coal is the worst coal because it has the most moisture and therefore the highest pollution'. The children informed me they were told on the excursion: 'we would be responsible for future energy innovations'. Asking why she thought adults might look to children for such solutions, she replied: 'because we're young, we have more imagination [than adults] and we think more. Like we think about what it will be like in the future and try and think about things to help the future' (Jill, 11 years old).

Ben and Jill's viewpoints are important on two fronts. First, they exemplify how regional children observe and learn about sustainability matters such as non-renewable and renewable energy through discussions and experiences that link them to the particularities of their everyday places. In this context, the Loy Yang power

station is a 15 min bus ride away, employs many children's parents, provides a significant proportion of the state's energy, and courtesy of its distinguished smoke plumes (a common sight for anyone who either lives, works in or passes through central Gippsland) is visible from their school. Second, the children's poem typifies how they conceptualise and embody sustainability through home/school and place-based experiences (Mannion & Lynch, 2016; Somerville & Green, 2015). The poem is representative of how regional children are engaging with and negotiating what Barbara Comber describes as 'significant changes not yet anticipated' (2013, p. 27). Given the escalation of change and adaptation within the region, as per the recent and future closure of Latrobe Valley power stations, and the associated transition from a coal-based economy to a low-carbon future, many children (and their families) in this region stand to be economically and socially impacted. Squarely connected to the global economies and social networks that transcend their local region, regional children's engagement with 'future energy innovations' is a global reality faced by many regional communities (Tomaney & Somerville, 2010) forced to re-envisage the future as a consequence of economic restructure and change.

'Sustainability is Something that Can Go on Forever'

> In my opinion, I think that sustainability is something that can go on forever and it's all part of all these little bits and they all come together to make it. So, there's energy, there's biodiversity, there's water, there is gardening, and there are animals. Our world doesn't use sustainability very much. It's falling apart a little and sustainability is basically a way to help the world (Janine, 10 years old).

Given children are often an overlooked demographic rarely consulted in research processes, and more widely disregarded in sustainability conversations, policy and decision-making, Janine's concerns and insights as articulated above (as well as those of her peers in this study), reveal the capacity of regional children to name and grapple with wider planetary sustainability on a local and global scale. Because study participants attended schools where diverse sustainability and environmental themes were advanced as part of a broader curriculum, their well-established sustainability sensibilities and worldviews were not surprising. What was illuminating, however, were the values and knowledge regional children held, including their sense of agency and efficacy, which supports them to continuously refine sustainable living practices across a variety of settings and learning environments such as formal and informal settings in schools and in family and community contexts (Nolet, 2016).

As a consequence, this study draws attention to children's unwavering aspirations for planetary sustainability, as represented through their desire for greater efforts to live within our means (i.e. live sustainably) and to act responsibly towards those whose inputs (e.g. natural systems) help us to live and survive well. In recognising and documenting their sustainability viewpoints and ways of being, the regional-based study is representative of a broader international agenda that demands greater effort in paying attention to children's hopes and visions for inheriting a sustainable

world (World Health Organization, 2017). Similarly, despite their concerns about the current state of the world (e.g. the decline and vulnerability of the earth, courtesy of human beings), regional children's hopes and visions were inextricably linked to the importance of 'living sustainably', or in 'sustainable ways', which acknowledged the earth's vital capacity to support itself in the face of unprecedented human demands (Griggs et al., 2013).

Amidst the complex and troubling problems identified by regional children, most were decidedly positive and hopeful about the future of their region and the greater planet to which they belong. Notwithstanding their explicit calls for adults to 'clean up the mess', they also identified themselves as having a substantial part to play in 'turning things around'. How humans (globally and regionally) engage with such monumental challenges such as addressing rising temperatures and populations, living with the depletion of natural resources and the subsequent loss of biodiversity to name a few, *how* we intend to turn things around is surely one of the greatest and urgent challenges in the period of the Anthropocene. Given the emergent changes and challenges in Gippsland, the study is an important contribution to the question of how education, and in particular education for sustainability might enable children's participation and acquisition of critical and creative thinking and problem-solving skills, competencies, concepts and tools. In keeping with the more critical sustainability literature, such skills have been identified as mandatory for navigating an uncertain future (Comber, 2016).

Methodologically, the study's arts/participatory-based approach prompts other important considerations about how educational research might be conducted with children more broadly, and how indeed, research design might be envisaged and applied to support their ideas and existence in the places where they live. One of the aims of the study was to view and position children as storytellers, capable of speaking to their lived experiences through a sustainability lens, and more specifically through diverse literacy representations and repertoires as chosen by them. The children's generated artefacts served as important points of reference that supported and enabled them to enunciate and engage with complex and sophisticated sustainability ideas, making possible new ways for them to envisage and combat a range of local and global sustainability challenges and solutions.

Finally, it is my hope this study contributes to a new stream of research deliberations shared by other FUGuE authors who are engaging with ideas about how regional research and regional researchers might pay homage to the intrinsic importance and meaning of regional existence, an overarching theme exemplified in the book's Chap. 1. While the study did not set out to explore the meaning of regional existence for children, it explicitly highlights how Gippsland children are making sense of their current and future existence through sustainability learning in local places. From their accounts, we are better able to understand how their sustainability learning and perceptions of sustainability have a direct bearing on their regional identity, their inhabitation of place and their sense of belonging. In this regard, the study breaks new ground in appreciating and documenting how regional children are thinking about sustainability-related challenges as identified by them (Canosa,

Graham, & Wilson, 2018), and how indeed they and others might actively participate in the imperative to address planetary sustainability.

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Chapter 10
From Northern China to Hazelwood Wetlands: Navigating Place and Identity Through Science Education

Hongming Ma and Monica Green

Abstract This chapter highlights an emergent self-study or professional inquiry that sits within wider longitudinal research examining the impact of a science teacher education university–school partnership in Latrobe Valley Gippsland. Partnership stakeholders in this particular study included the two authors (Hongming and Monica—Federation University Gippsland Education (FUGuE) researchers and science teacher educators), pre-service teachers and teachers/students from a local primary school. The chapter explores a number of complexities pertaining to our redesign of a science education course in the Bachelor of Education (primary) teaching programme. Central to the changes we made was a transition from university-based lectures to place-based science lessons conducted by pre-service teachers in a local wetland. As part of the self-study, we met regularly throughout the semester-long science education course to discuss course preparation, implementation, design and delivery. These recorded and later transcribed conversations became the main data collection source of the study. We also generated personal autobiographies as a way of reflecting on our personal, professional and collective learning journey within the science education course. Our analysis of this overall process brings to light emergent levels of complexity and uncertainty in our attempt to reshape science education through a partnership model. While we each had and shared very different experiences of the science education course, the chapter pays attention to the strengths of our differences, and in particular, its contribution to our collaboration. The impact and implications of the self-study are discussed, and in conclusion, we highlight the contributions of place-oriented approaches and collegiality that supported us to undertake science differently.

Keywords Science education · University–school partnership · Self-study · Professional inquiry · Pre-service teachers · Identity · Place

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Introduction

In this chapter, we describe our shared learning insights from a science teacher education initiative. The self-study or professional inquiry at the centre of the chapter is part of longitudinal research that examines a science teacher education university–school partnership that encompassed multiple stakeholders: us as science teacher educators, our pre-service teachers (PSTs) and in-service primary teachers and students from a local primary school. One of the key innovations of the partnership was the use of a local artificial wetland in Hazelwood, Latrobe Valley, situated between our university and the participating primary school, which was used as a teaching site. In the spirit of earlier research that explored partnership impact on in-service and pre-service teachers (see Green & Ma, 2018), this chapter adopts a self-study methodology to examine our personal and professional positions within the science education partnership. As part of the study, we assumed the respective roles of 'critical friend', a practice that has been well theorised by our FUGuE colleague Anna Fletcher in Chap. 6, to reflexively examine our personal and professional transformation within a 12-week (semester-long) science education course. Drawing on her own professional exploration as critical friend to a local primary school community, Fletcher characterises critical friendship through notions of trust and provocation, which she explains, enhances reflection. As Fletcher argues, the role of a critical friend is to critically challenge assumptions via a critique of participants' practice and viewpoints. Appropriately, and directly aligned to the underpinnings of our self-study, Fletcher reminds us of how critical friendship methodology can be employed as part of collaborative professional inquiry that involves pairing colleagues from the same setting as critical friends for each other. By critically examining and reflecting on our science education practice, our self-study is squarely situated within FUGuE's wider vision for regional research that privileges relationality and reciprocality. As such, our critical friendship has been instrumental in our shared transformation of becoming more place-responsive teacher educators.

The science initiative had two intertwining dimensions: the first involved developing science education through a university–school partnership, and the second was concerned with teaching science in a wetland setting. Each of these aspects is embedded within a wider discourse of national and global teacher education renewal that seeks authentic learning contexts for PSTs, as well as stronger connections between theory and practice (Darling-Hammond & Lieberman, 2012). Such links can be observed in the broader Australian teacher education landscape, and more specifically in the Teacher Education Ministerial Advisory Group's [TEMAG] (2014) report that amplifies the significance of theory/practice integration in teacher education programmes.

In light of these considerations, our role as science teacher educators exposes us to the multiple challenges faced by many Australian primary schools where science teaching is either limited or in some instances non-existent (Goodrum, Hackling, & Rennie, 2001). Moreover, research suggests that many in-service teachers (ISTs) have negative attitudes towards science (Kenny, 2010), directly impacting PSTs expo-

sure to adequate science teaching mentoring. Acknowledging this dilemma, Jones et al. (2016) propose science-dedicated, school-based science partnerships in teacher education as an influential strategy for enabling PSTs to practice science teaching. In line with their science pedagogy innovations, we contend that building structured and mutually beneficial university–school partnerships holds great capacity for PSTs to integrate theory and practice (TEMAG, 2014), and experience first-hand, the ways science can be effectively taught in outdoor settings (Green & Ma, 2018).

As a way of enhancing PSTs active involvement in their science learning, as well as scaffolding their scientific knowledge and pedagogical practice, PSTs in our course were required to teach science beyond the traditional classroom setting (Zeichner, 2010). This pedagogical approach runs parallel with worldwide educational thinking and practice that recognises the contributions of diverse 'informal' scientific learning environments—in and out of school, which support experiential and pupil-orientated learning (Wallace & Brooks, 2015). A good example of this can be seen in the educational offerings of science museums and nature centres, who through carefully designed and practical experiences, are challenging and changing the roles and responsibilities of students and teachers in science learning (Kawalkar & Vijapurkar, 2015; Salmi, Kaasinena, & Kallunkia, 2012). Likewise, these informal settings are becoming increasingly recognised for their capacity to develop personal science epistemologies (Lobos Jung & Tonso, 2006; Salmi et al., 2012; Yeh, 2017), and advance science communication more broadly (Stocklmayer & Rennie, 2017).

In the same vein, outdoor environments such as parks, school grounds and other naturalised sites are also becoming recognised as valuable sites for science education (Adams & Branco, 2017; Fisher-Maltese, 2013). Although outdoor settings are known to promote students' cognitive, affective and physical development (Malone, 2008), many ISTs and PSTs lack the confidence to teach science in them. Key stumbling blocks include a lack of teacher's science knowledge and training (Carrier, Tugurian, & Thomson, 2013), teacher concerns about control issues, teaching within curriculum boundaries, as well as finding time to teach science in an overloaded curriculum (Green & Ma, 2018).

As science teacher educators with aspirations to build our students' scientific knowledge and confidence to teach science in primary (elementary) education settings, we came to the realisation that we wanted and needed to do science 'differently'. As such, for the past 3 years, we have applied and theorised the university–school partnership model in our science teacher education work. In addition to our pursuit of strong and effective outcomes for all our partnerships stakeholders, we have developed a significant interest in better understanding the role science teacher educators play in partnerships (Jones et al., 2016; Kenny, 2010). Despite teacher educator-researchers reporting positive effects of partnership-oriented PST coursework (see Carrier, 2009; Green, 2016), partnership influence on teacher educators' personal and professional learning remains a largely under-examined field of study. In light of this, the main intention of our self-study is to explore and highlight our personal and professional transformation as a consequence of our involvement in a science partnership initiative and to utilise the research process to further develop and improve our science education practice.

Background and Study Context: Partnership Emergence and Application

The university–school partnership that underpinned our self-study was originally established by Monica prior to her science collaboration with Hongming. When she partnered with Hongming to co-teach the science method course in an undergraduate Bachelor of Education programme (primary), she proposed utilising the partnership as a way of framing teaching and learning within the science education course. This approach included using the nearby 10-acre artificial Hazelwood wetland. In the early stages of the science course, we introduced the partnership to PSTs, which involved them planning and implementing a 25-min 'tuning-in' lesson around the topic 'Adaptation' in small teaching groups (4–5) to primary school children at the wetland. A central element of the partnership involved meeting regularly with the school teachers and the local power company who owned and built the wetland. During this communication, we negotiated complex and incompatible timetables between the school and the university, all the while attempting to ensure stakeholder agendas were being met.

The school's ISTs delivered an introductory lecture on inquiry-based learning to the PSTs and provided lesson plan feedback and informal mentoring on the wetland-teaching day. As PSTs were required to consider the pedagogical possibilities at the wetland site, Monica delivered a lecture on place-based pedagogies to set the theoretical foundation for their science lessons. Following this, PSTs visited the wetland 2 weeks prior to lesson delivery to familiarise themselves with the wetland environment and to select appropriate teaching sites that aligned with lesson outcomes. Many PSTs had never previously visited a wetland and as such, had limited personal and pedagogical experience in it.

A Window into the Hazelwood Wetland

As represented across many of the other chapters that make up this book, our academic work is situated in the region of Latrobe Valley, central Gippsland. Our partner school is located in the regional township of Morwell where many families experience socio-economic hardship, intergenerational unemployment and chronic health issues. Many students at the school have learning difficulties that require additional teaching support, and a large proportion has aboriginal heritage. Historically, the university–school partnership had used the wetland as its point of reference for teaching and learning. Wedged between two adjoining roads, the hidden wetland boasts an expansive body of water that is surrounded by grass tussocks, melaleuca tea tree, Blackwood and local gums. The site is home to migrant birds and other species: white swans build nests on a small island in preparation for the arrival of their cygnets; close by, the criss-cross tracks of native water rats through the grass and mud tell another story. These everyday wetland comings and goings occur within a

Fig. 10.1 Pre-service teachers build miniature bark canoes with children at the wetland

wider industrial landscape dominated by the recently decommissioned Hazelwood power station and a woven set of ubiquitous power lines that transport regionally produced electricity to urban Melbourne. For the many children who rarely leave the region or have limited access to special places in their out of school life, the wetland is a magical wonderland that supports their inquiry-based outdoor learning in place (Somerville & Green, 2012) (Fig. 10.1).

Theoretical Framework: Place, Identity and Place-Based Education

The self-study is informed by theories of place and identity, and place-based education (PBE). Adams, Hoelscher, and Till (2001) describe place as 'socially constructed and produced at an enormous variety of scales, from the body to a building like a museum, to a city or suburb, to an ecosystem like a wetland, to a nation state, to the world or cosmos' (p. xxi). In this sense, they propose places as both concrete and metaphorical. Our study is located in the Latrobe Valley and is affiliated with local communities and the natural environment, both of which are experienced and concrete. Moreover, we see the place of Latrobe Valley as a metaphorical

'contact zone' (Pratt, 1992) where different perspectives meet and interplay through social, cultural and educational practice; where identities within and beyond the region are formed.

Gee (2000) defines identity as 'the "kind of person" one is recognised as "being" at a given time and place, can change from moment to moment in the interaction, can change from context to context, and of course, can be ambiguous or unstable' (p. 99). According to Casey (2001), identity is created through the body's physical interaction with the place; self and place are interconnected in a sense that each is an ingredient of the other. The sense-making process continues as people move to new places, becoming the 'ingredient' of the new places, negotiating the meaning of the places and continually contributing to the shifting of shared social memories (Twigger-Ross, Bonaiuto, & Breakwell, 2003).

Theories around the bond between place and identity are linked to the formation of identity in place, while place-based education (PBE) theories focus particularly on using place as a pedagogical site for educational purposes. Gruenewald (2003) argues that the conceptualisation of a theory of place should acknowledge the embodiment of human–world relationship as an inherent part of places themselves. Further, he suggests that for the purposes of democratic education, schools should facilitate meaningful student participation in the process of making and shaping places. Others view places as pedagogical, enabling individuals to authentically experience, understand and value the entwined, intermingling and sensorial connections between people and place (Duhn, 2012; Somerville, 2010).

Applying a Self-study Methodology

Self-study methodology stems from the context of teacher education and is defined by Zeichner as 'disciplined and systematic inquiry into one's own teaching practice' (1999, p. 11). According to Hamilton and Pinnegar (2014), through systematic reflexive process embedded in a self-study, teacher researchers have the opportunity to examine their own teaching and develop assertions for action to improve their professional practice. Notwithstanding the definitions of self-study as diverse, we are attracted to it as an ontological concern that enables us as researchers to position our research in and explore the space between self and other (Hamilton & Pinnegar, 2014). Given the complexities of self-study practice, researchers are encouraged to negotiate the tensions between generalising private experience for solving public issues and guiding private practice with public theory and insight (Bullough & Pinnegar, 2001). Building on these views, Loughran (2010) advances teacher educators as agents of educational change, suggesting that genuine change happens after teacher educators develop a better understanding of the complexities of teaching and learning, which includes focusing on personal experience.

As innovative teacher educators, we have sought self-study methodology as a way of better understanding the complexities of our practice, which set out to generate educational change. As part of the reflexive research process, we engaged in regular reflective conversations as critical friends, which enabled us to learn from and work

with one another (Marshall, 2004). In order to increase the trustworthiness of our study, we acknowledge Feldman's (2003) advice on providing clear and detailed descriptions regarding data collection and representation construction as detailed in the following sections.

Method: Conversational Reflections Between Two Teacher Educators

The purpose of our study was to reflect on our academic work in the science teacher education course as a way of improving future practice. We did this by asking the following questions: What have I learnt from this experience by working with/in a university–school partnership and mentoring PSTs in teaching science in outdoor settings, and what are the implications of my learning for ongoing practice as a science teacher educator? The data set consisted of our respective autobiographies as well as recorded conversations and meetings before, during and after course delivery. We viewed our autobiographies as part of the data set as a way of telling our broader lived experiences and histories that are central to the study context. As Pinnegar and Hamilton (2009) remind us, we reposition our past experience in the meaning-making of our total life experience when we bring forward a past memory into the present time. We view our autobiographies as enabling; allowing us to make links between our past and present, providing a platform from which to analyse how we connect self to others as we focus on the 'problems and issues that make someone an educator' (Bullough & Pinnegar, 2001, p. 17).

Acting as critical friends we communicated our individual understanding of our respective roles and practice, which included inquiring about, and challenging each other's perceptions of working with/in partnership through a place-based pedagogy framework. Audio recordings were transcribed and revisited to identify themes in relation to our research questions. The themes were discussed and further examined with regard to the individual learning we experienced throughout the teaching semester and are interpreted and presented later in the chapter as 'the learning journey'. Following this, we discuss our collaborative learning, focusing on the impact of the self-study for our teaching practice.

Our Place-Culture Autobiographical Reflections

Hongming's Story

I came to Australia from China after a few years teaching in a secondary vocational school. At that time, many Chinese students chose to study overseas out of curiosity about a world once shunned due to political and economic reasons, and in the hope that

the new adventure would bring new perspectives and opportunities that would enrich their life experiences. I was one of them. After a few years of postgraduate study, I was offered a position as a teacher educator at the Gippsland campus. The changes I had to deal with were significant and posted both opportunities and challenges for me, personally and professionally (sometimes these two dimensions intertwined). The largest challenge came from the multifaceted cultural differences. There were new people to live and work with, new social and educational systems to become familiar with, and, new cultural traditions I needed to respond to. I needed to learn the English language not as a 'foreign' language (as I did in China), but as a daily language spoken as part of who I am now. All these changes were part of the driving forces that made me reshape my view of self and others—my self-identity.

Among most of the influential driving forces was the impact the place had on me. I did not identify myself as a person that had strong place attachment back in China. Moving to Australia raised my awareness of the environment around me as the landscape and climate were very different. Coming from northern China, which has a typical temperate monsoon climate with four clearly distinct seasons, I could not tell the four seasons in Melbourne for the first few years—most of the months were the same to me with only a few very hot days in summer. All the trees were gum trees with evergreen bushes throughout the year. I started to miss the feeling of excitement when I spotted the first sprout from a bare branch in spring in China. To some extent, the changes made me rediscover the significance that the place had on me in China (things that I had taken for granted) and memories of past places became symbolic links representing who I used to be. The new place, however, had not gained significance as part of who I was becoming.

The same was true in terms of my relationship with the Gippsland region. For the first few years, my movement was limited within the university campus and so was my mind. I did not have many meaningful exchanges with local people and community. The region seemed to me nothing special as elsewhere in Victoria, where I remained an outsider culturally, without sharing the history with the people. I could not feel the same feeling. I used to have some conversations with one of my colleagues on how people could be judged by their appearance and behaviour. He said that the same judgemental rule would not apply to me as people already see me as 'different'. This feeling of being culturally 'other' haunted me in the first few years and I was not sure how it could be overcome.

When I first started my work at the Gippsland campus, I became a member of a research group called 'Place, Space and Body'. The group was led by Prof. Margaret Somerville and dedicated to place-based pedagogy research. Although I gained a fundamental understanding of place pedagogy during this period, I struggled to find my place within the conceptual framework. At that time, it was difficult for me to envisage the connection between science education and place pedagogy, except for areas closely related to environmental education. The opportunity appeared when Monica approached me with the proposal of working with a partner school that involved PSTs teaching children at a local wetland as part of the science method course I coordinated. I had conducted some classroom observations at the partner school but had never worked with the teachers in a formal partnership, nor had I ever

mentored the PSTs design and delivery of lessons in outdoor settings. All of this meant I needed to step outside my comfort zone and work with all the uncertainties the partnership brought. I knew I would learn much from the experience and that it would be the start of a transformative journey.

Monica's Story

My personal identity as a 'Gippslander' commenced as a child growing up on the south side of Morwell, a few hundred metres away from the iconic open cut mine. At night I could hear the clunking machines unearthing the brown coal that would be used for electricity production at the nearby Hazelwood power station. I came to know my local neighbourhood through adult-free shared adventures with siblings and other kids from Anglo and Italian families in our respective backyards and local creeks. Fast forward to my primary teaching career that commenced in a small rural school in West Gippsland where my students and I spent considerable time outside building gardens, making compost and planting trees as part of everyday learning.

It wasn't long before I returned to full-time study and pursued my eventual profession in outdoor education. For the large part of 15 years, I worked and lived in the Australian bush—cross-country skiing, bushwalking and kayaking rivers and oceans in wild and semi-remote alpine, desert, river and ocean environments—on trips that lasted anywhere from 3 days to 3 weeks. Teaching in these settings fostered my ongoing passion and love of the natural world, and profoundly shaped my personal and professional interest in social and ecological matters associated with planetary sustainability. These opportunities also instilled within me a sense of adventure and strengthened my pedagogical capacity to take calculated risks in my teaching.

In my eventual transition from outdoor education to teacher education many years later, I returned to Gippsland where as part of my role as teacher educator, I sought new collaborations with teachers, environmental educators and community and cultural leaders as a way of framing my teaching and my students' learning. My appreciation of the pedagogical value of local places, neighbourhoods, wetlands and school grounds were underpinning themes of my Ph.D. that examined and theorised place/community pedagogies. My Ph.D. research focus was further expanded when approached by a leading (retiring) primary teacher from a local school seeking a school–university partnership in the Morwell River wetland.

Although my daily commute to university took me past the wetland, I had never ventured through its gates. My initial wetland visit took place on a sunny but cold winter's day with a small group of colleagues from the School of Education where we met the passionate teacher and power company's environmental officer who showed us around the site to view frogs, bird life, carp traps and human-made nest boxes. While the tour exposed me to the site's ecological richness, it was the follow-up wetland trip that brought to life the site's pedagogical significance. Here I observed children's learning as they undertook the role of journalists interviewing local ecologists; as scientists monitoring the health of the water through water testing activities,

as photographers taking photos of frogs hidden under logs, and as architects building miniature huts from sticks and branches with Gunaikurnai Elder Aunty Doris Paton.

What transpired after this unforgettable experience was a new and (eventual) sustained collaboration with the local school that linked teacher education coursework to place-based learning. Working with the logistics of 50+ PSTs and over 150 children in the first year of the partnership was challenging, and I did my best to support my pre-service teachers to deliver fun practical lessons to children. Despite my outdoor education expertise, feelings of anxiety and uncertainty at the initial wetland-teaching day filled my body: so many complex logistics to deal with, so many nervous PSTs, so many excited children, so much potential for things to go wrong; and for things to go right as it turned out. My teacher education practice beyond this day would be forever changed.

Our Shared Science Education-Learning Journey

Hongming's Reflections

The personal and professional re-formation of my identity has been the major learning outcome from this self-study. I start from the first day I visited the wetland. Monica led the way and showed me the various locations—pockets of native forest, a bird hide, shallow pools of water and the grassy meadows. I felt both excited about the possibilities of doing something new, and at the same time unsure about how to capture the possibilities in my teaching. I feared that I did not have enough knowledge about the wetland and worried that our PSTs did not have sufficient wetland knowledge either. Later we shared our initial experience in a recorded conversation:

> *Monica*: Hongming, would you be happy to talk about anything the wetland visit brought up for you?
>
> *Hongming*: I have visited similar places, but not as a science teacher educator but more like a tourist. … just admiring the scene. But at that time, I was also thinking, "If I were the students, what kind of teaching activity I could do with the kids?" … I also noticed that you were feeling quite comfortable with the environment, and you pointed out different things to me—like I was the student, and this is a quite good learning experience. I realised that I don't have all the knowledge about the wetlands.

Once I acknowledged the gap in my own wetland knowledge, I undertook some research on local ecosystems and tried to link this to my general knowledge about adaptation and natural selection. However, the most remarkable learning moment for me was not from books or the Internet: it happened in the wetland when I accompanied Mr. M. (a former science coordinator from the local primary school) leading a 'nature walk' for a group of PSTs on the reconnaissance day. Mr. M. had rich knowledge about the wetland and he showed the PSTs animal tracks, different types of plants and where to find frogs around the water pools. As the wetland opened further and deeper during the nature walk, the knowledge I gained before from books and the

Internet became connected more closely to the particular site, and the wetland itself became less superficial to me.

A sense of place at the wetland was not just cognitive or intellectual to me; it was also affective. The sense of becoming intimate (emotional) with the place increased as I became more familiar with the wetland. Monica and I pursued discussions about the significance of what the wetland offered pedagogically, which might include feelings of emotion:

> *Hongming*: I grew up in city areas, I feel like this is not a place that I'm quite familiar with…. But I also feel that the environment is so wonderful, and you would enjoy everything around you. So, this [the wetland experience] is more related to emotional feelings. You can design some activity that combines the feeling of enjoying the environment and also make learning happen.
>
> *Monica*: What I'm hearing is [that] while you might be uncertain about the wetland and there's some ambivalence and unknowns—many unknowns in fact—you can see some possibilities of what might happen there. … I'm hearing an idea of emotional learning. I think there are many layers to learning that might happen at the wetland.

By experiencing the place, myself, I realised the transformative power of PBE and increased place awareness within my own pedagogical development, which included the potential of incorporating cognitive and affective educational purposes into a place-based pedagogy. Consequently, I feel more confident and more passionate about mentoring PSTs to plan place-based lessons. The wetland place has become more meaningful to me (not just gum trees everywhere) but unique plant and animal forms that have adapted to a particular Latrobe Valley wetland environment.

Pedagogically, the wetland experience was the first time I had attempted to incorporate PBE into my science method framework. I was worried that if our PSTs were not effectively mentored with outdoor pedagogies, I would fail the primary school students whose learning was dependent on us for a whole day. I did not feel that the incorporation of outdoor pedagogies was conducted effectively at first, and expressed my concern to Monica after six weeks of teaching:

> *Hongming*: I found that I'm working on two tracks and to be honest these two tracks are not working together very well. On the one hand I have to cover all the general science method and on the other hand I will have to think about how to scaffold the students into wetlands teaching and also give them time to do that. Just reflecting on the first 6 weeks, this hasn't been done in a very harmonic way.

Delving deeper into the source of the challenge, I realised the problem was a representation of my struggle at the conceptual level of incorporating PBE as an organic part of my own science teaching pedagogy. The struggle dated back to my earlier years as a member of the 'Place, Space, Body' research group, when I found it difficult thinking about science teaching outside of normal classrooms. Having had this understanding, I started to examine the way I dealt with PBE and essential science teaching methods and began identifying the meeting points through curriculum links and an inquiry-based model that allowed various aspects of science teaching strategies to be explored through the meaningful incorporation of PBE.

When I analysed my conversations with Monica, I could see we had spent a lot of time discussing organisational details, and I asked many questions about how to

work with the teachers from the partner school. Discussions ranged from clarifying school expectations and communicating those expectations to our PSTs, to trivial matters such as working out PSTs groupings, activity locations and wetland parking arrangements. It was through these various practices that I had opportunities to engage with local people and community at different levels. I was conscious about working on the partnership in a culturally appropriate way: I saw Monica as a cultural 'insider' and mentor who helped me negotiate meanings within the 'contact zone' (Pratt, 1992). It was like I had landed in totally new territory, trying to navigate and find my bearings with Monica as my *compass*. Her advice also highlighted the emotional support she provided through her collegiality that helped reduce my anxiety as I worked with the uncertainty and the unknowns.

As one of the stakeholders in the partnership, my increased cultural understanding was a major outcome. In time, I began to understand the effective ways of expressing my own ideas, asking for clarification and learning the art of negotiation with multiple stakeholders. I felt more confident in approaching people in the community—ISTs, pre-service teachers and my academic colleagues, as well as creating new working relationships with each of them. It was also encouraging to see that people, judging from the way they interacted with me, started to see me as 'us' instead of 'other'. The partnership experience alone has not been sufficiently adequate for me to claim that I have become a cultural 'insider' in this region; however, it has significantly increased the bond between me as a science teacher educator, and the particular place of Latrobe Valley.

Monica's Reflections

My first learning experience in the science partnership was focused on adjusting to my role as mentor, which involved sharing my accumulated partnership skills and knowledge with Hongming who was new to the partnership model. Not having had any previous mentoring in my own partnership learning, unsurprisingly this felt like new terrain. Being a pragmatic type, I deemed it important to share organisational and pedagogical considerations with Hongming, which included highlighting the need for regular and facilitated communication with ISTs that genuinely acknowledged their ideas and agendas. I emphasised the varying stakeholder responsibilities, the need for keeping PSTs informed about expectations and associated timelines, and the broader importance of supporting them in their foray into the new field of outdoor teaching and learning:

> *Monica*: no one gets a free ride [in a partnership] … everyone needs to make a substantial contribution. We don't want the teaching staff to think, "Oh I don't have to teach science because the preservice teachers are going to do it for me." We want to hear their ideas; we want the teachers to have a very active role; we want to hear their feedback. The communication with school is a very intensive thing and it's ongoing… you need to set up good systems of

> communication. It's all extra work [on top of the normal lecturing workload] and you have to just keep consulting everyone. Partnership work is very different to working on your own. It's quite tiring actually.

On reflection, this bombardment of ideas had great potential to overwhelm anyone new to partnership practice. Although I understand conversations like this as an important part of my partnership mentoring in the science education course, on reflection, the organisational focus may have inadvertently hijacked other important discussions, such as the development of scientific coursework concepts, and how, for instance, they might be developed and delivered by our students out at the wetland. Other science-focused conversations with Hongming, however, brought us back to acknowledging and advancing science as a simple 'everyday' notion:

> *Hongming*: And I think another interesting discussion between us is how you understand science. Because sometimes in science education we talk about stereotypical image of science and scientists that people have. Normally when talking about science, people think that you have to be in the laboratory with a white coat and doing stuff like physics, chemistry type of thing. But you can do science just at your backyard, or when you're in the kitchen, and in the wetlands. So, I would say most of them involve science.

Unexpectedly, my new mentoring role in the science course triggered personal and somewhat earlier (negative and stereotypical) memories of secondary school science. I would later learn that many of our PSTs brought similar narratives to their own science learning. I believe it was these insights that fuelled my desire to tackle science differently; to make it more accessible, authentic and enjoyable for pre-service teachers. In addition to these aspirations, we were both keen to document our science journey more formally through a research process, as portrayed by the following conversation:

> *Hongming*: …the data set for this particular part can be just students' reflection and interview data. I still think it would be good at the start of the year to just get some informal [data] and that can be anonymous, because that gives us a data set of what we were dealing with at the start of the course.
>
> *Monica*: You know what would be interesting, and I haven't done this before… we might record how students are feeling about having to teach science in a wetland, because I think there is a lot of ambivalence and uncertainty there. The PSTs have got a lot of challenges to manage in this approach.
>
> *Hongming*: Yeah, like for example, in the first week we can ask more general questions about what they think science and science teaching is about, and reflect on their own experience as learner and how they see themselves as future science teachers. And the second - maybe in week 3 or 4 we can ask them to reflect on their feelings about teaching science in the particular [wetland] sites.

Following these brainstorming discussions, we began to develop ideas about longitudinal research that would investigate the nature and scope of science teaching and learning in outdoor settings through stakeholder perspectives. In light of this decision, Hongming suggested:

> Maybe we can extend our current research to next semester and then next semester we can have something different? For the teachers it will probably be the first time they've been involved in a partnership. We could make comparison with the different teachers, and we can see the difference and maybe we can explore our development of an effective school/university partnership.

From the science education experience, I have come to appreciate the contributions of co-teaching in a partnership model, and the different strengths of such a collaboration. Partnership work is challenging and arduous, and significantly more enjoyable when shared with a colleague. Hongming has taught me the value of 'sharing the load' and capitalising on our distinctive skill sets.

The Implications of Our Partnership Work in Science Education

First and foremost, the science education partnership set out to provide PSTs with an opportunity to practice and enhance their science teaching skills. Furthermore, it provided a cultural contact zone (Pratt, 1992) informed by our individual and differing points of views, professional skills, knowledge and personal and cultural life experiences. As our autobiographies testify, we each brought different perspectives to the project. Building on these considerations, the following section of the chapter engages with the second aspect of the self-study, namely, the implications of our learning for future practice as science teacher educators, as explored through two themes: the value of place-based education in a science education course and the importance of collegiality and relationality in a partnership model.

The Value of Place-Based Education in a Science Education Course

Our partnership experience has made us more confident to understand and apply place-based pedagogies in science teacher education. Citing Plowright et al. argue that a nuanced understanding of place creates more meaningful knowledge for those in that place (refer Chap. 1), our experience highlights our individual and collective growth in understanding the nexus of place pedagogy and science teaching. As illustrated in 'The learning journey' section of this chapter, Hongming's deep engagement with the wetland place advanced her scientific knowledge of the life sciences and brought with it a new connection to human and natural communities.

Hongming's professional learning experience also sheds light on the impact of developing meaningful attachment to a new place, particularly in relation to notions of mobility and immigration. Gustafson (2009) observes that placement attachment and mobility are often seen as contradictory phenomena, with local attachment

regarded as deficient compared to the norm of global mobility; or valuing placement attachment for social integration or regarding mobility as a threat to social cohesion. With growing social, economic and cultural exchanges at the local and global level, addressing relationship with place (material and symbolic) becomes an essential element of how people react and interpret change (Anton & Lawrence, 2016). Hongming's engagement with local 'insiders' in the physical and the cultural spaces of her new place (Latrobe Valley + wetland) has helped inform her professional development without necessarily compromising her attachment to 'old' places in northern China. Subsequently, her 'sense of self' and 'sense of belonging in place' have come about and developed over time through personal and meaningful engagement with place (Rishbeth & Powell, 2013).

The affective impact of place-based learning cannot be underestimated. In addition to increasing her pedagogical appreciation of the wetland site, Hongming has developed a closer bond with the wetland. Similarly, from her ongoing time at the site, Monica's lifelong (educational and pedagogical) interest in environmental and outdoor education in local places is significantly strengthened and affirmed. As our exploration of place increases, so too does our emotional investment and sense of belonging in place. While we are yet to investigate these same outcomes with our students, we remain hopeful that a place-based pedagogy framework can enable them to develop new relationships with local people and places. Based on our accumulative insights, we have now embedded reflective assessment tasks in the science method course to encourage critical and personal thinking about the pedagogical significance of the place.

Collegiality and Relationality in a Partnership Model

The science partnership has been underscored by multiple complexities—covering key science teaching methods, developing and maintaining stakeholder relationships, and dealing with the pedagogical challenges of working in a wetland environment. Managing these complexities between our teacher educator selves takes careful consideration and raises the need for collegiality and relationality. In her role as mentor, Monica effectively shared and highlighted the cultural norms and skills associated with developing partnerships, which were initially foreign to Hongming. This shared knowledge has had a direct bearing on building Hongming's understanding of what it takes to craft and maintain an effective university–school partnership. Likewise, Monica's professional development as partnership mentor and science learner/teacher has been substantially enhanced. Furthermore, the shared and trusted collegiality has created new opportunities for us to explore, negotiate and reconstruct new meaning of science and science education. As our autobiographies illustrate, we each brought distinctive interpretations and understandings of science and science education (as derived from earlier life and professional experiences) and recognise these earlier layers as influential to our current professional practice.

Through reflective and respectful conversation we have investigated and developed a shared meaning of scientific and pedagogical concepts that lie at the heart of our teaching. To this end, we believe the authentic challenges we faced in developing the science education course required open-mindedness, mutual support and respect. Even though we each initially perceived our individual limitations in the place-based science course as a shortcoming, we took solace in knowing we could draw on each other's strengths and look to each other in reliable, reciprocal and respectful ways. Drawing on our collective skill set, we have been resolute in finding solutions when problems arose, thus reducing (but never fully avoiding it must be said) the potential anxiety and uncertainty associated with trialling new teaching innovations.

Stepping Out of Personal and Professional Comfort Zones

Our self-study has provided us with a unique opportunity to explain, reflect on and refine our place-based science education endeavours that occur in the regional setting of Gippsland. Through examining our practice, and our own identity re-formation in relation to the partnership experience, we have unearthed previously unidentified elements of our personal and professional identity that support us to better understand ourselves as science teacher educators. Like other FUGuE authors in Part II of this book who have ventured into partnership relations for teaching and research purposes, we too have been transformed by our science experience. As such, we are more confident to innovate in our teaching, and we better understand the importance of relationality and reciprocity as central facets of our teaching and research practice. Although we realise there are many aspects of student learning, we are yet to know, we view our professional inquiry as a practice in progress: 'solidified in the moment' but with the understanding that 'idea(s) may [will] continue' (Hamilton & Pinnegar, 2014, p. 159).

As articulated, this self-study belongs to longitudinal research that examines the pedagogical contributions of science-based university–school partnerships in a regional setting. Now in our fourth year of partnership work, we are, more than ever, attuned to the reality that engaging with local people and local places for educational purposes requires continually working with uncertainty and the unknown. In stepping out of our personal and professional comfort zones, we are keen to develop new insights into how science education can be taught in new and transforming ways. We hope our professional inquiry efforts resonate with and inspire other teacher educators who dare to take their work in new and unknown directions to improve teaching and learning outcomes for their students.

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Chapter 11
The Lived Experiences of Graduate Students: Transforming University Education in an Online Space

Dianne M. Harrison and Susan Plowright

Abstract Reflective of a global trend, there has been a notable increase in online learning enrolments in the Australian higher education sector. Online learning has a critical place in widening access and participation to higher education particularly for those from backgrounds historically underrepresented in Australian universities, including regional and remote students. However, both retention and completion rates for online and distance students are considerably lower in comparison with on-campus students. Among the barriers are a lack of social interaction, technical skills, costs and access to the Internet. Of all of these issues, it is the lack of social interaction that can be seen as the most severe barrier to online learning enjoyment, effectiveness and the possibility of a student taking another online class in the future. In this chapter, Di thus draws on the 'lived experiences' of a cohort of graduates who completed an online graduate programme through Federation University School of Education, to identify ways to improve social presence between online learners and teacher educators. After achieving ethics approval, and through a hermeneutic phenomenological lens influenced by Heidegger, she conducted in-depth, individual interviews. She sought insights into the students' positive experiences, frustrations, barriers (both structural and individual) and challenges encountered during their online learning experiences, as well as professional practice ideas for improved learning experiences in the online environment. She analysed and interpreted the interview data using an Interpretative Phenomenological Analysis (IPA) methodology, and the findings have deepened her understanding of online pedagogical practices and transformed her own online education practices.

Keywords Heideggerian phenomenology · Social presence · Higher education online learning · Lived experience · Transformation · Regional higher education access

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Introduction

In recent times, there has been a notable increase in online learning enrolments in the Australian higher education sector, which is reflective of a global trend (O'Shea, Stone, & Delahunty, 2015). Australian higher education student numbers have grown rapidly since 1960, and by 2014, the total domestic and international student enrolments were just below 1.4 million (Norton & Catikaki, 2016). Although undergraduate numbers increased by the largest absolute number over the last 30 years, postgraduate coursework has doubled its share of total enrolments from 11 to 22% (Norton & Catikaki, 2016). According to the Australian Bureau of Statistics (2012), in 2010, just under 1 million (81%) of higher education students were studying internally (on-campus), of which 7% were in multi-modal programmes (partially delivered on campus and partially through distance and/or online delivery). Since 2001, students whose enrolment mixes on- and off-campus study have been included in a separate 'multi-modal' classification. By 2014, nearly 10% of students were enrolled on a multi-modal basis and the proportion of students studying off-campus had increased to 17% when compared to the early 1990s (Norton & Catikaki, 2016).

Improved educational technology via the Internet has made this 'blended' learning and off-campus study easier and McGilvray (2014) suggests some of the reasons institutions offer online courses includes improving student access, more efficiently meeting students' needs, addressing students' interests, and providing educational content based on students' learning styles and work schedules. Additional reasons for offering online courses include higher degree completion rates, increased enrolment and increased return on investment in online students (McGilvray, 2014). Online learning thus has a critical place in widening access and participation in education for a diverse range of students, many of whom are from backgrounds that have been historically underrepresented in Australian universities (Stone, 2017). Students from low socio-economic backgrounds (low SES), students with a disability, regional and remote students, Indigenous students and students who are first in their families to enter university are represented particularly strongly in online undergraduate programmes. Postgraduate students are much less likely to study full-time, but an upward trend is apparent for them, reaching 38% in 2014 (Norton & Catikaki, 2016). However, both retention and completion rates for online and distance students are considerably lower than among those enrolled as on-campus students (Stone, 2017).

Bejerano (2008) defines online education as the transmission of information and skills through instruction provided via the Internet. All online courses are similar in that they do not take place in a traditional face-to-face classroom environment and students are spread out across the country or even across the world; all instruction and classroom activities are transacted online; and the students and lecturers generally do not meet one another (Bejerano, 2008) face to face. The format of online instructional delivery can vary though with, for example, some classes requiring synchronous (real time) attendance while others are structured to allow for asynchronous (any time) participation. Significantly, the online platform allows students access to information and educational content anytime, anywhere (Wozniak & McEldowney, 2015). This

meets twenty-first-century learning needs of flexibility to manage study, work and family commitments (Bailey & Card, 2009) as well the logistics of access, cost and travel, which is particularly relevant for regional, rural and remotely (see Chap. 1) located learners.

Alongside these benefits, however, are key underlying constructs of social interaction, technical skills, cost and access to the Internet which represent a number of barriers to students, prompting the possibility of adverse perceptions of online learning (Muilenburg & Berge, 2005). Of all of these issues, it is the lack of social interaction that can be seen as the most severe barrier to online learning enjoyment, effectiveness of learning online and the possibility of a student taking another online class in the future (Muilenburg & Berge, 2005). The underpinning nature of 'social presence' and how it can be fostered in an online learning environment informs Di's current research investigation which this chapter reports on, into how a teacher educator can enhance social interaction in an online learning situation. A definition of social presence offered by Garrison, Anderson, and Archer (2000) is that it is the ability of participants and lecturers to project their personal characteristics into the online community in order to present themselves, and be perceived, as real people. In a situation where there is a lack of perceived social presence, the potential for negative attitudes towards the online teacher and lower affective levels of participant learning can be exacerbated (Sung & Mayer, 2012).

Di's interest in the significance of social presence in the online space arises from her own personal distance education online learning and teaching experiences. Her goal to complete a teaching degree was realised precisely because she could enrol at a regional university as a mature-aged student, which provided both an accessible campus and the flexibility of distance learning. Her own 'lived experience' of returning to study as an online postgraduate student was very challenging: it was difficult to simultaneously manage family responsibilities, participate in paid employment and engage in online learning. Subsequently with a very strong sense of social justice, as a lecturer at the same university (now known as Federation University), she became motivated to support students who similarly wished to realise their dreams of becoming a teacher, from a distance.

Her own identified need for social interaction and personal encouragement in order to continue with online studies subsequently substantially influenced her approach to online teaching. Thus, the conceptualization and design of the current research project aim to find the best ways to socially support online students and so transform her own online teaching practices. In light of this consideration, the overarching research question that guided her Master of Education minor thesis asked: *How can social presence be developed in the online learning space between lecturers and students?* She utilised a hermeneutic phenomenological lens influenced by Heidegger, conducting lengthy interviews of at least one to two hours (Leedy & Ormrod, 2013) and an Interpretative Phenomenological Analysis (IPA) methodology. This chapter sets out the methodology, methods, initial findings and interpretative discussion of some the data collected for her study. The chapter begins though with a review of literature that identifies a scholarly warrant for her research through exploring what it has to say about the idea of 'social presence'.

Literature Review: Online Humanism Through 'Social Presence'

Di recognises her own teaching philosophy is grounded in humanistic theories and perspectives such as educational humanist John Dewey and psychologist humanist Carl Rogers. The Deweyan inspired Progressive Education Movement in the 1920–1940s, argued learning is a social and person-driven act (Sage, Smith Adcock, & Dixon, 2012) while similarly, Rogers (1983) argued that attitudinal qualities such as realness, trust and empathetic understandings in a teacher are essential to facilitate learning. This 'attitude of realness' is achieved when there is no 'façade' between a teacher and a learner (Rogers, 1983, pp. 121–122). In this philosophy, the personal relationship between facilitator and learner is a key notion thus, achieving 'realness' when the facilitator/learner relationship is mediated by online technologies is Di's central question.

Online learning, where computer-mediated communication (CMC) is used as the primary learning medium, differs from face-to-face learning environments in fundamental ways (Symeonides & Childs, 2015). Yuan and Kim (2014) propose that flexibility and convenience are key reasons for the growth in online learning, but they also note that student attrition rates are a problem, which Cherastidtham, Norton and Mackey (2018) also found to be a continuing trend with increasingly low rates of completion for off-campus students. Yuan and Kim (2014) found students failed to complete online studies mainly due to 'an inability to complete coursework requiring collaboration, insufficient communication with teachers and peers, lack of technology skills, and conflicting timetables' (p. 220). They argue the main factor adversely impacting on students can be attributed to a lack of interaction with instructors and peers, leading to students feeling isolated. Gunderson, Theiss, Wood and Conti-O'Hare (2014) claim that 'barriers of time, distance, technological glitches, employment, and family problems make creating student engagement difficult with the risk of loss of interest, discouragement, and eventual attrition' (p. 339), but argue that personal contact 'can be the inspiration necessary to spark participation, interest, and engagement' (p. 339). Thus, Di turns to an exploration of the concept of social presence as a desired state in the online learning environment, because social presence is perhaps the most popular construct used to describe and understand how people socially interact in online learning environments (Lowenthal, 2009).

The Emergence of 'Social Presence'

Historically, Lehman and Conceição (2010) argue that 'social presence' was first discussed in literature around the early 1970s with Short, Williams, and Christie (1976) writing about how individuals can be seen as 'real' when communicating using mediating technology and that the amount of 'presence' is based on the type of media used. Lehman and Conceição (2010) explain the idea using the example of distance

education learners who used to receive video cassettes recorded by instructors to supplement written correspondence material. The students reported feeling 'a sense of instructor presence when they listened to the instructor's voice and could hear the nuance and tone' (Lehman & Conceição, 2010, p. 9)

Short et al.'s work on social presence theory developed from Argyle and Dean's (1965) concept of 'intimacy' and Mehrabian's (1966) concept of 'immediacy' or the 'immediacy principle'. This is described as a 'directness and intensity' in communication (Bartlett Ellis, Carmon, & Pike, 2016, p. 10). In social relational research, immediacy is thought to be signalled in the communicator's attitude towards the receiver and the message and characterised by approachability; stimulating interest in the receiver; conveying connectedness between communicators; and promoting receiver engagement in communication. In this regard, communication can be viewed as reciprocal in nature (Bartlett Ellis et al., 2016). In relation to online learning specifically, Moore 'was the first to focus on interaction issues in distance education in the early 1980s' (Garrison & Cleveland-Innes, 2005, p. 134) when he classified distance education learner interactions into three types: 'learner–content, learner–instructor and learner–learner'. Garrison and Cleveland-Innes (2005) argue that this framework subsequently spawned an interest in the role of social interactions in a distance or online learning context in addition to the focus on delivering content. Educators and researchers have since continued to investigate the social dimensions (Kehrwald, 2007), including Garrison and Cleveland-Innes (2005) who argue for a Community of Inquiry (CoI) approach that is the 'integration of cognitive, social, and teaching presence' (p. 134), which we elaborate on below.

Social presence here is defined as 'the ability of participants to project their personal characteristics into the community thereby presenting themselves to other participants as "real" people' (Garrison et al., 2000, p. 89). Considered together, these authors argue, the three presences address the qualitative nature of interactive inquiry consistent with the ideals of higher education (Garrison et al., 2000). However, they also caution that interaction by itself does not presume that a student is engaged in a process of inquiry or that cognitive presence exists. Equally, students are not always prepared to engage in critical discourse, especially in an online learning environment. Thus, as they highlight, understanding interaction is complex and the greatest student adjustment to online learning was most directly associated with issues of social and cognitive interaction (Garrison & Cleveland-Innes, 2005). Sung and Mayer (2012) present a congruent argument stating that 'a lack of social presence may lead to a high level of frustration, a negative attitude toward the teacher's effectiveness and a lower level of affective learning' (p. 1738), an insight Di picks up to further understand and address in her phenomenological research design of exploring the lived experience of online students.

Enhancing Teacher Online Social Presence

In face-to-face learning environments, links between teacher immediacy, student motivation and affective learning have been well-documented, highlighting significant interactions between instructor immediacy behaviours and student learning and satisfaction (Melrose & Bergereonon, 2007). In these classrooms, instructional immediacy was further defined as a non-verbal manifestation of high affect and is demonstrated through maintaining eye contact, leaning closer, touching, smiling, maintaining a relaxed body posture and attending to voice inflection (Melrose & Bergereonon, 2007). Verbal components of the construct include using personal examples, engaging in humour, asking questions, initiating conversations with students, addressing students by name, praising student work and encouraging student expression of opinions. In this context, immediacy is associated with certain learner attitudes and perceptions, such as interest in content and state of motivation in relation to learning and can lead to liking and feeling close to instructors, which can generate positive effects in face-to-face classrooms (Bartlett Ellis et al., 2016). However, in online classroom environments where these cues are mostly absent, this notion of communication is not as easy to articulate (Melrose & Bergereonon, 2007).

This phenomenon led to researchers from several different viewpoints being interested in examining ways to enhance online social presence by determining the factors underlying online social presence (Sung & Mayer, 2012). For example, Shea and Bidjerano (2009) draw on a significant and growing body of conceptual and empirical literature which has attempted to articulate and expand upon the CoI framework which articulates the behaviours and processes required to nurture knowledge construction through the cultivation of the three forms of 'presence' mentioned earlier. In order to assess the value of this model in actual educational settings, they conducted a large-scale study of more than two thousand online learners to validate an instrument designed to measure teacher, social and cognitive presence. Their findings indicated that the 'social presence element associated with comfort in online discussion was the most significant item correlated with variance in the cognitive presence of the respondents' (Shea & Bidjerano, 2009, p. 551), and that when students saw their instructors taking an active role in focusing online discussions on relevant issues, a much higher cognitive presence was measured by this factor in their study (Shea & Bidjerano, 2010).

Similarly, Melrose and Bergereonon (2007) found that associations between instructor immediacy behaviours and student learning and satisfaction are significant and the experience of liking and feeling close to instructors can lead to positive effects in online classrooms. They argue that correlations between immediacy and affective learning exist and that immediacy behaviours are likely to enhance instructional effectiveness (Melrose & Bergereonon, 2007). Giles, Smythe and Spence (2012) also found that 'relationships are essential and matter to the educational experience whether it is recognised or not' (p. 214). They suggest that while there is value in theorising from empirical data about relationships, 'it is equally important that educational research consider the "lived experiences" of relationships in education

as this draws us towards essential understandings of the relationship' (p. 216). Di takes up their challenge in the research reported here to consider in depth, the lived experience of online graduate students through a phenomenological methodology, which we now set out.

Methodology and Methods

Phenomenology

Phenomenology has a strong philosophical component and draws on the writings of Husserl (Creswell, 2007). As a research methodology, phenomenology is concerned with the qualities, values and impressions of experience rather than with the what, when and why characteristic of methods that promote abstraction and explanation (Barnacle, 2004). The hermeneutic phenomenological approach as advocated by Heidegger that Di specifically draws on orients research to the 'lived experience' (phenomenology) and interprets the 'texts' of life through a method known as hermeneutics (van Manen, 2017). Heidegger's ontological focus uses the phrase 'Being-in-the-world' to refer to how human beings exist, act or are involved in the world (Dowling, 2007). The hermeneutic phenomenological approach is thus utilised as a methodologically rigorous framework for studying the lived experiences of 'being-in-the-online-world' of online students.

Interpretative Phenomenological Analysis (IPA) is an approach to psychological qualitative research that has grown rapidly since it first emerged in 1996 (Wagstaff et al., 2014). In this method, the researcher's interpretation of the text is considered a crucial element in the development of a coherent, themed investigation (Wagstaff et al., 2014). Distinguished therefore from descriptive phenomenology, IPA seeks to 'give voice' to a phenomenon and to then make sense of that initial description in relation to wider social, cultural and theoretical contexts. As Wagstaff et al. explain, the IPA researcher employs an empathic but critical hermeneutic process to produce a probing account based on the research participants experience, as hermeneutics involves the 'restoration' of meaning (2014, p. 2). Additionally, IPA draws on interpretation to see what is normally hidden and to identify meanings embedded in human experience so that the researcher plays an integral and dynamic part in the generation and interpretation of data (Wagstaff et al., 2014).

The Participants

Participants were recruited from a recently completed graduate studies programme in secondary education that was offered either wholly online or had no compulsory on-campus attendance. Support from programme leaders who administered the

online postgraduate and graduate initial teacher education programmes at Federation University was sought and given. Once university ethics approval was gained, invitations to participants were sent via email, seeking a phone or face-to-face, hour-long, recorded interview. Usually, a typical sample size in phenomenological research is from five to twenty-five participants who have had direct experience with the phenomenon being studied (Leedy & Ormrod, 2013). However, although I was hopeful of attracting at least 10 research participants, only a total of four students expressed interest, which may have been related to the anticipated time commitment and that students had graduated and 'moved on'.

Federation University (where the courses were delivered) is geographically located at several regional campuses including Gippsland in the Western District and on the eastern side of Victoria in Gippsland, the academic 'home' of the authors as FUGuE (Federation University Gippsland Education) researchers. The participants referred to here as 'Ida', 'John', 'Karl' and 'Rachel', specifically enrolled with Federation University as the programme and specialist sequences they wanted to study were only offered through the university. Rachel and Karl completed their online degree part-time, whereas John and Ida studied full-time. Karl lives in the western region, Ida and John live in the eastern region and Rachel lives in Melbourne, the capital city of the State of Victoria. All participants were mature-aged and had direct experiences of online study. Each participant had parental responsibilities with children attending either primary or secondary schools. Karl worked full-time and Rachel, a single parent, was employed part-time. John and Ida were not engaged in paid employment. Ida and John, who live not far from the Gippsland campus, attended separate face-to-face interviews; the other interviews were conducted over the phone.

Data Collection

The individual interviews were conducted in June and August of 2016 and recordings of the four interviews were professionally transcribed during November of the same year. Phenomenological researchers depend on lengthy interviews of at least one to two hours (Leedy & Ormrod, 2013), where the role of the researcher is to say little so that the data is created and structured primarily by the research participant (Matthews & Ross, 2010). The phenomenological interview is often an unstructured interview with the researcher and participants working together to 'arrive at the heart of the matter' (Leedy & Ormrod, 2013, p. 145). These interviews 'go deep' and allow the researcher to see an event or context from the point of view of the participants (Hammond & Wellington, 2013).

Interviews though can be defined as 'unnatural' kinds of conversations as they involve making explicit rules of the conversation about what is being discussed and for how long (Hammond & Wellington, 2013). Thus, Hammond and Wellington (2013) claim that semi-structured interviews may be 'more manageable than unstructured ones and avoid the inflexibility of the fully structured approach' (p. 92).

The characteristics of a semi-structured interview include following a common set of topics or questions for each interview; introducing the topics or questions in different ways as appropriate for each interview; and allowing the participant to answer the questions or discuss the topic in their own way using their own words (Matthews & Ross, 2010, p. 221). Di adopted a hybrid approach that allowed interviews to run for as long as participants wanted to talk drawing on phenomenological principles. She used open-ended, semi-structured interview questions that were the same for each participant but chose not to inhibit the participants from including their own topic and streams of thought.

Analysis

Paley (2014) argues that when people are asked about a certain 'experience', they believe that they are retrieving an at-the-time set of 'subjective occurrences'. He goes on to explain that even though it might genuinely feel as if that is really what they are doing, they are drawing on a culturally available repertoire of standard accounts about the nature of this type of experience and about the kind of thing that typically explains it (Paley, 2014). Lived experience as part of the theoretical framework of this study therefore focused on making explicit the perspective of the participants who have lived through the experience of being an online student at a regional university. In making explicit the participants' lived experience, the aim was to understand the meaning these participants had with regard to their existence as an online student. It was in this spirit that Di then viewed the topic and participant responses through new and different lenses in order to look beyond and transform her current knowledge (Clough & Nutbrown, 2002).

The human experiences of the study participants were coded and themes identified. These findings offer insights into the challenges encountered during their online learning experiences, ways to improve professional practice as well as the learning experiences of students in the online environment. The interview texts were coded using NVivo analysis software to identify themes, exact words or phrases that were similar in meaning. My overarching goal was to get as 'close' to the data as possible. Further, it was important to go beyond mere description and I considered not only what was said but also how it was said, and what this actually tells me about the experience. This was central to ensuring she developed a deeper, interpretive analysis (Noon, 2018).

Limitations

One of the risks to validity and reliability in qualitative data is subjectivity bias, whether intentional or unconscious. In this research study, a phenomenological method has been applied, whereby the role of the researcher is to say little with the

data being created and structured by the research participant. However, the selection of data to be coded was decided by the researcher, not the participant who had lived the experience. In the spirit of acknowledging researcher subjectivity, it is difficult not to ignore the researcher's interests, motivation and experiences in the analysis and interpretation of data. Although researcher bias is important to recognise, a possible alternative may be to involve participants in the coding of data, which may be a potential area for future research for Di.

Findings

The lived experiences of the study participants were coded, and themes identified by Di. These findings offer insights into the challenges encountered during the participant's online learning experiences. The main finding was online learning is a vehicle to gain graduate initial teacher education qualifications; however, there were four other findings (themes) that arose in the data: opportunity and access to online learning; flexibility benefits and tensions; engagement (cognitive and social); and communication.

Opportunity, Access and Necessity

All students expressed their belief that online learning provided an entry point into continued higher education, but it was not necessarily their preferred option. The opportunities presented for each varied. Rachel originally enrolled as a part-time online student so she could continue to live in Melbourne, support her children and complete her specialism studies, saying 'I'm in Melbourne and it's in Gippsland or Gippsland and that meant my options are limited in some ways. So, I decided to do the online course'. Ida had an opportunity to complete her graduate studies to gain her teaching qualification. She had previously worked as a secondary teacher before migrating to Australia. She told me: 'If I want to complete this master's programme I had to take those two courses. Unfortunately, they're not doing it face-to-face here at Churchill campus, so I didn't have any other option, I had to take it whether I like it or not, I had to take it'. Karl had not studied online before however wanted a new direction in life and could achieve his goal only through online study. 'I could only do it online. That was really the only option that I had'. John had previous experiences with both face-to-face and online studies and was changing his career path. He preferred face-to-face study so regarding online study, he stated, 'I didn't choose it, I was given it'.

Flexibility in Tension with Time

The notion of flexibility in online learning was expressed across all four participant conversations. The flexibility and convenience of online study appeared to be the main reason Rachel enrolled with the regional university. As she said: 'I intended to study part-time and online so that I could be at home and support my children who are at school themselves but also because of the distance, I thought well that makes sense. I can still do the course that I wanted to do'. Even though Ida felt challenged by having to study online, she enjoyed its flexibility: 'I think when it comes to managing time online courses are really good because whenever you want you can login to it and you can do the reading and do the things'.

John identified elements of online study that also allowed for flexibility, but noted that in relation to contacting his lecturer to engage in conversations outside of advertised availability: 'I guess because the nature of online, particularly if it's wholly online, is you're not working when the lecturer's working, so you can't have real-time conversations, or very seldom'. Karl similarly expressed tensions between flexibility and time in a different manner due to his family circumstances which meant he could only engage in online study at weekends, as indicated: 'I don't get to spend a lot of time with my kids anyway because they're all school age. So that weekend time is time that traditionally I would use, well before my qualification I'd be using with them or spending with them. And that's time that I just currently haven't had'.

Engagement: Cognitive and Social

The theme of engagement was prominent and careful interpretation identified cognitive and social elements. I have interpreted cognitive engagement being experiences that relate to online learning of content and social engagement being experiences involving relationships.

Cognitive Engagement

Engagement with online materials revealed disappointing experiences for many of the students, which included disappointment and resignation in having to comply with, rather than engage actively in online learning. As John told me: 'I think lecturers just tend to take their face to face stuff and just put it online, and therefore it is online'. Rachel also expressed similar feelings: 'My specialisms, which were all online, were quite difficult for me to feel connected with the course content'. Ida named her need for a face-to-face environment in order to be engaged cognitively so that the online space was harder for her to construct meaningful knowledge: 'For me, I'm a person that I always like to see things like in reality, like face to face, so it

was a bit challenging for me to participate in those online modules'. John expressed frustration with the lack of interaction and reported a negative learning experience, suggesting: 'It's just a splat of lectures and resources which you'd normally get face to face just put up there for you to access at your own rate'.

Social Engagement

This section speaks to the levels, or lack thereof, of social engagement (relationships and experiences) identified by participants about what it should feel like between a lecturer and student. For Rachel, this involved coming to terms with the lack of social engagement in her online studies as highlighted: 'I transferred from being an online student to being an on-campus student because I didn't like not having conversations with the lecturers and the other students'. The importance of connecting with others was also flagged by Karl, who is accustomed to interacting with many people in his work and is aware of how he comes to 'know' a person: 'You need to have a real connection with someone before you can deal with their video representation and get the same amount of human interaction out of it'. In this same light, Rachel used words such as 'empathy', 'relationship' and 'personal' to help describe her experiences:

> There's an empathy that comes from meeting someone in person that doesn't come through a computer screen. There's a connection that, and a relationship that seems more personal or even though it's University so it's not personal as such but it's, it's, it feels as though you have a better understanding of the person.

Communication

Conceptions of communication emerged as a major theme when interpreting the interview data. Participants expressed a need to experience more opportunities to communicate in the online space. Karl articulated the need for lecturers to communicate regularly with online students suggesting that 'if you have absolutely no communication with the lecturer it can really, it can really leave you feeling lost at sea I think'. Similarly, Rachel was looking for greater discussion opportunities as well, saying that: 'If I have a question I ask it and I want to hear what other people think'. John also mentioned effective communication and suggested that regular communication via the online learning system would improve the cognitive development of concepts being presented in learning materials. He noted, referring to his expectations of the lecturers:

> I think in today's environment, if you do an online course, then your responses, at least have to be daily, and comprehensive, and appreciating the fact that just because you've explained it doesn't mean everyone else gets the same benefit from the materials.

These responses express disappointment and suggest the importance of effective, regular online and other communication between lecturers and students. Communication appears to have a direct and important role in influencing the satisfaction of these students' online experience and therefore their retention in the course which we now discuss.

Discussion: Transformation of Online Teaching Practice

An interpretation of the data suggests that all participants desired more (personalised) communication, including face-to-face discussion and regular contact with their online lecturer. This finding is congruent with the literature and ideas of social presence as the sense of community that can develop among students and with their lecturer, which can be crucial in an online programme for improved student retention and connection to the academic institution through cognitive and social engagement. To achieve this, Kumar and Ritzhaupt (2014) argue that students should feel comfortable communicating through an online medium (e.g. discussion boards or virtual classrooms) and should be comfortable giving and receiving feedback from their peers. Multiple communication media (asynchronous, synchronous, formal and informal) should therefore be provided for the building of social presence in case students are unfamiliar with online communication (Kumar & Ritzhaupt, 2014). Social presence can be fostered through prosocial instructor behaviours and careful design of online discussions, as well as faculty development focusing on social presence issues (Swan & Shih, 2005). In addition, they suggest that explicit training for students in the importance of social presence, ways of presenting themselves online and the nature of online discussion might help particular students better adapt to the medium (Swan & Shih, 2005).

To achieve this, Bailey and Card (2009) suggest that lecturers need to be organised; students should be given all course materials at the beginning of the class; be provided with direct links to the necessary websites and resources; be clearly informed about how to navigate the university website to successfully complete the course. Flexibility is another crucial element for effective online teaching noting that online instructors have to be prepared to cope with issues such as system delays, software updates, email glitches and the like. They argue good online instructors are those who possess the knowledge and skills on how to use and adapt updated technologies. Furthermore, instructors should respond promptly to emails and text messages and return graded assignments with feedback in a timely manner and have online lectures should be made available to enrolled students for the duration of the online course.

As Lanas and Kiilakoski (2013) argue, the individual teacher mostly exists in an individualised teaching culture in 'their' classroom so that 'educational change depends on what teachers do and think—it is as simple and complex as that' (p. 129). They argue that understanding the process of educational change requires an examination of the experiences of an individual teacher in order to identify the contexts the individual teacher may have to consider when gaining insights into the complex

nature of educational transformation. Di is embarrassed to admit that after using her master's study to examine her practices, how little she previously understood about effective online teaching practices such as these. To this end, reading through the interview transcripts has been confronting as she recalled engaging in some of the very practices that disappointed the participants. She was mindful that while her teaching practices were finely tuned for on-campus face-to-face teaching, they initially were largely ineffective in the online space.

Fortunately, institutional help in the form of online learning designers was available to assist her with strategies and skills to engage learners, to develop her own teacher 'presence' and foster student's social and cognitive engagement. Institutional investment in provision of support like that available at our university can help ensure access and opportunity for teachers to equip themselves with new skills and ideas and successfully implement new strategies (Stone, 2017). As Stone argues, the delivery of online education needs to be viewed as core business and invested in accordingly by committing to it a level of priority and resourcing equitable with on-campus education. Such levels of investment and commitment, when clearly voiced and actioned at an institutional level, can create an environment in which online students have greater opportunities to persist with and complete their studies. Stone (2017) argues that this could be demonstrated by online teaching being recognised appropriately in the academic workload model; consultation with experienced academic staff, including making it available for sessional teaching staff (such as Sue), to set benchmarks for realistic online class sizes and paid hours required for effective teaching and support; programmes that improve online student engagement, satisfaction, retention and/or academic success receive dedicated, ongoing funding; investment made in technology improvements, including learning platforms, learning design, learning tools and data analytics to deliver an engaging and positive online student experience (Stone, 2017). While we argue there could be an improvement, much of this is available via a dedicated centre and readily available learning designers at Federation University.

Thus, in response, and taking the initiative to think about her teaching, she has taken up many suggested ways to improve connections between the lecturer and student. She has adopted practices such as making learning materials available at least 2 weeks in advance; ensuring course documentation is updated and assessment tasks have the correct submission dates prior to opening the learning management system referred to as 'Moodle', and responding within 48 h to emails and forum posts. She now routinely uploads weekly announcements to maintain a regular social presence in each Moodle classroom. She also actively seeks support from learning designers with the aim of introducing a new online teaching tool/resource each semester, so that her teaching practice continues to be innovative and is a positive learning experience for her online students.

To help make important connections between herself and her online students, at the beginning of a semester she uploads a video recorded welcome message, so students can see her, hear her voice and gain a sense of her as a real person, approximating the introductory experience of a face-to-face classroom setting. But she has decided that placing the focus only on her online interaction may not be

enough to develop connections with online students. So, in addition, she now actively cultivates, where possible, opportunities to connect with students 'offline'. Thus, she makes the most of any opportunity to meet with students on campus, such as at open days or advertising special events to encourage students to attend campus in order to further develop genuine and 'real' face-to-face personal relationships. She also tries to connect with students when she's out and about visiting other students on placement and tries to connect with any nearby online students. Her efforts align with the wider understanding from the literature that the experience of liking and feeling close to instructors can lead to positive effects in online classrooms (Melrose & Bergereonon, 2007).

She argues though that perhaps more emphasis could be placed on faculty meeting students face-to-face either at the beginning of a course/programme or at the end of the first year of online study using ideas like those in a study conducted by Kumar and Ritzhaupt (2014). These authors followed a group of students who, at the beginning of their first year, attended a 2-day on-campus orientation and at the end of their first year, attended a 1-week campus-based experience that was integrated into their summer seminar. The two campus experiences facilitated the building of social relationships among students and with faculty; the development of cognitive presence, expectations and application of the programme; and faculty and social presence in person, before and after online interactions (Kumar & Ritzhaupt, 2014). This layered and institutionally supported approach of personal and faculty 'social' connection could be effective and is something Di is keen to continue to explore as it is a wider strategic priority of her regional university that predominantly caters for rural, regional and remotely located students.

Conclusion

Over the years, online education has enabled much greater levels of student participation, giving students who were previously unable or unlikely to take up tertiary education an opportunity that was inconceivable not that long ago (Lynch & James, 2012). Mid-career professionals and people with significant work commitments, those with family responsibilities and disabilities, as well as the many people who live in regional and remote areas, can now enrol in courses and programmes from leading universities without major upheaval or disruption to their lives (Lynch & James, 2012). But the mere existence, opportunity and flexibility provided by online learning do not adequately tell the full story. As participants in this study indicate, the experience of online learning is not necessarily engaging, rewarding and motivating in and of itself. Such outcomes require the dedication and skill of the online teacher who needs to be well equipped in ensuring student's individual learning needs are met in the online space (Stone, 2017).

The overarching aim of the research study, through drawing on social presence theory and phenomenology as a way to better understand a student perspective, was to improve social presence between learners and teacher educators in the online teaching

space. Findings from this study have deepened Di's understanding of online pedagogical practices to better equip herself with skills and practices that aim to transform online education for her students in the virtual space and turn their experience into a transformative, rather than disappointing one. Her Master's thesis work and writing of this chapter, in a scaffolded approach with Susan as an informal mentor, illustrates how FUGuE operates in a very collegial, fluid and non-hierarchical way. This highlights the importance of this sort of research milieu at a small regional campus. Di nearly withdrew from the writing of the chapter a number of times, but the support, encouragement and critical friendship of all FUGuE members propped her up and supported her to complete her first ever publication. This determined and concerted version of 'social presence' is an antidote to the frequent dispersion of colleagues to teach at other campuses, work in isolation with cohorts of online students, research on-site at some distance from the campus or visit pre-service teachers on placements in schools some distance away. Such is the reality of teacher educator academic work in a small satellite campus of a regional university. However, the FUGuE research space (see Chap. 1 in this volume) has proved fertile for increasing research activity from our small group. The research process itself has proved fertile for improving Di's higher education teaching practice and the quality of online education to service our mostly rural and regionally placed students.

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Postscript

Educational Researchers as Agents of Regional-Global Transformations

To conclude our case study, we draw our voices together and restate our core themes in unison, as a musical FUGuE concludes in coda form in unison reiteration of the melodic statement. At its conclusion, a new creation has come into being. This contrapuntal technique, say Corazza, Agnoli, and Martello (2014, p. 93), is a

> a paradigmatic and a beautiful representation of the very nature of the creative thinking process. […] counterpoint can be read as a representation of the intrinsic impetus of the creative process, i.e., the combination and juxtaposition of opposite elements to go beyond established knowledge and enable the generation of new and valuable ideas.

As FUGuE and the authors, we harness this creative potential of polyphony, presenting aspects of each of our educational research programmes in the preceding chapters, so that in the weaving of our distinctive voices a new creation and publication emerges. FUGuE's central melodic statement is formed of three intertwined themes from which our (con)textual compositions emerge. On examination of all the chapters in complete collation above, these themes are only strengthened and reinforced, which we summarize below, concluding with some new positionalities and possibilities the process of writing the book has generated. These have opened up some ways to expand our work as regional-global agents of transformation.

Regional Standpoints

Giving voice and visibility to regional standpoints is the first of these themes. In Chap. 1, we wrote that Bauman utilizes Gadamer's idea of 'fusions of cognitive horizons', which require mutual understanding borne of shared experience but that

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sharing experience 'is inconceivable without shared space' (Bauman, 2007, pp. 91–92). Creating shared experiential spaces to achieve fusions of cognitive horizons through educational research is a *raison d'etre* of FUGuE and each chapter and the book as a whole create such spaces. Several chapters have been deliberately designed to create space for regional people to speak for themselves. Chapter 3 is written by Susan Plowright but in close partnership with Gabbi Boyd and Sophie Callcott, a principal and teacher, respectively. Their own words are faithfully transcribed and replicated forming the backbone and structure of the chapter. Additionally, Gabbi and Sophie were frequently consulted as the chapter emerged. For the writing of Chap. 7, Sue Emmett and Cheryl Glowrey began with a *tabula rasa* and decided to invite Nicholas Johnson, a proud Gunai (local to Gippsland) Monero Ngarigo and Gunditjmara man and Aboriginal Liaison Officer at the Gippsland campus of Federation University, to create a new partnership, ensuring that a Gunaikurnai voice had authorial presence in the book. Importantly, it was Nick who conducted all the interviews and it was a deliberate decision on Sue, Cheryl, Nick and interviewees part to be named respondents, in order to clearly ensure Gunaikurnai and original inhabitant standpoints were spoken in first person, rather than being spoken for. This is a very significant standpoint which contributes to the collection and is an important voice for our School to embrace. Monica Green, in Chap. 9, reports on her innovative methodology that invited children into the research experiential space to express their sustainability hopes and ideas through diverse self-made artefacts, making space for children to speak for themselves. Monica's chapter brings us Janine's voice, which is complete with intuitive and perceptive echoes of the creative energy of counterpoint,

> In my opinion, I think that sustainability is something that can go on forever and it's all part of all these little bits and they all come together to make it. So, there's energy, there's biodiversity, there's water, there is gardening, and there are animals. Our world doesn't use sustainability very much. It's falling apart a little and sustainability is basically a way to help the world (Janine, 10 years old).

Monica argues, the study breaks new ground in appreciating and documenting how regional children are thinking and also responds to the context in which she was working and honour children's stories in relation to where they were living and going to school.

Several chapters give voice to communities whose initiatives on behalf of Gippsland children and youth reveal regional people's determination and the rich vein of goodwill and civic energy that regional communities can generate and can thrive on. For example, Nicola's Chap. 4 and Margaret and Michael's Chap. 6 each focus on community-led projects which bring regional community initiative and self-determination standpoints to the fore. In collection, the chapters in Part I give voice to standpoints encompassing early childhood, primary and secondary school sectors from across all the local government areas comprising Gippsland (refer Chap. 1) and Part II itself presents some of our voices in person, as southern tier academics from a barely visible new and small regional university and satellite

campus of that university. Our voices in and of themselves are marginalized and deserve to be heard and given space. This book is that space.

Relationality and Reciprocality

When we first came together, our 'mapping as method' process revealed that relationality and reciprocality were central principles of all our research designs. This convergence is the second theme that constitutes FUGuE. It is revealed in many of the chapters that present research designed and conducted in partnership with Gippslanders, contributing to the phenomenon we name in Chap. 1 as 'regional research reinvestment'. Chapter 2 by Cheryl Glowrey and Susan Plowright sets out the early stages of birth to year 6 partnership in a small and relatively isolated outer regional locale. The chapter reveals their contribution as simultaneous researchers and local residents to the partnership with early childhood and school educators who had not previously worked closely together. In Chap. 5, Anna Fletcher reflects on the in-school partnership she has cultivated with a primary school close to the university campus. In this collaboration, she theorizes the nature of the relationality and reciprocality she has fostered and how that positions her. Linda Macgregor in Chap. 8 reflects on teaching and learning partnership between a community service provider, schools local to the university campus and herself as a university lecturer and the pre-service teachers she was teaching. Her agency enabled the service organization to extend the reach of their services to many more low socioeconomic children than they otherwise would have accessed. This arrangement of reciprocal benefit to all parties is a feature of all FUGuE research projects including Di Harrison and Susan Plowright's Chap. 11, which centres on relationships between higher education students and lecturers. The whole purpose of Di's researching of the online learning space was to improve relationality between lectures and students at a physical distance and mediated through information and communication technologies.

In another aspect of relationality, Hongming Ma and Monica Green (Chap. 10) formed a partnership with local schools and like Linda, also brought teacher education students and school students together to build relationships around natural science, and nature conservation and preservation. As a result of their partnership pedagogy within the local community, they built new relationships with people and place. This served as the basis of their reflexive research practice reported on in Chap. 10. This complexity of relationships and ideas of reciprocality epitomizes regionality, where lifeworlds intersect, overlap and bump together in contrapuntal form into a 'multiverse' (see Preface), disrupting neat and discrete categorisations and codifications, which perhaps feeds and leads to the third FUGuE theme of 'disruptive transformations' we identified.

Disruptive Transformations

The very FUGuE way of working itself disruptively transforms hierarchical ideas of research structures and collaborations, which the book as a case study reveals. But our projects each intend to disruptively transform to generate a new sustainable, just and hopeful *modus vivendi* for Gippsland and Gippslanders in some way. Cheryl and Susan's birth to year 6 partnership intended to build new cross sector relationships to disrupt sectoral silos and isolated geographies. Nicola and Margaret and Michael's chapters illustrated the contribution of a regional university can make to supporting locals who agentially disrupt limitations and barriers of regional living. Anna, along with all authors, disrupts ideas of 'distance' between researchers and researched but shows that rigorous and fruitful scholarship can be generated through site-specific, place-based regional research. Sue, Cheryl and Nick's chapter sought to disruptively transform our School of Education's relationship with the Original peoples of Gippsland and have brought their perspective to a new audience through this book. Linda, Monica, Hongming and Di have disruptively transformed their own practices as teacher educators grappling with the opportunities and exigencies of researching and teaching in a small campus of a new regional university. Compiling all our research into one new form in the form of this book, also attempts to disrupt notions of impact and engagement by arguing that as well as individual, our research in and across Gippsland, has a wide and discernible impact through engaging with many people, places and sites, fostering relationships, building bridges and generating many new local beginnings. The creative milieu of FUGuE has spawned many new ideas and the scale of our work is scaling up as we see the global relations and transformations we are agentially contributing to. For example, Anna has connected with Swedish scholars who she cited in Chap. 5 and they have visited the campus and delivered a presentation and now an international partnership is forming generating publications (Fletcher & Wennergren, 2018), conferences and other new initiatives. Another example can be seen in a collaboration between Monica and her American colleague collaborating on how the notion of 'collective hope' supports sustainability change agents to undertake their work within a region in transition. Drawing on many of the theories presented in this book they give due consideration to conducting regional research (Green & McClam, Forthcoming). Additionally, Susan presented a paper at an international philosophy of education conference, generating international interest and potential future collaborations, and Cheryl presented new research ideas, at an international conference also garnering international interest and possible collaborations. As a result of the writing and editing of the book and around 50 iterations of this book title, we now see in our work that we are **agents of regional-global transformations**.

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Afterword: Voice and Agency from the Geographical and Academic Edge

This diverse and engaging collection pursues a number of important research objectives that are central to our educational and learning challenges of the early twenty-first century. It does so in the context of the Gippsland region of Victoria with a specific set of environmental, social and political factors at play. The interface between the regional context and the research projects pursued here is a continuing concern, and a vital contribution of these chapters. We all live somewhere, despite the dislocating effects of the digital age, and FUGuE researchers show a constant attention to specifics; a desire to deal with and respond to the local and the regional, and a concern to make a research impact within place.

While the research has explored a number of regional educational disadvantages and barriers that learners face in the Gippsland region, the work as a whole highlights the capacity of those in the region to honestly and earnestly tackle the vexing issues that are made manifest through such disadvantage. In partnership with FUGuE researchers, there is a willingness to pursue positive change. There are more than enough narratives around regional deficit, and indeed, unfortunately, some statistics which tend to give credence to such a regional vision, but Gippsland is nothing if not diverse. The weight of evidence shows that the deficit view is contested and that FUGuE researchers are dynamic in activating these contestations. Perhaps nowhere is this more clearly articulated than in Green's chapter where she shows us that knowledge in place provides a crucial springboard for children's understanding of sustainability. In a region where resource industries such as coal mining, fisheries and forestry have been voraciously pursued, this is nothing if not a refreshing and dissonant finding.

From new conceptualisations of 'at risk' students through to being a critical friend or evaluating a science education programme, the chapters deliver an important set of findings. Rather than repeat those here—these researchers are more than capable of speaking for themselves—it might be more useful to make some observations about common themes that emerge from these chapters. First, it is striking how often the authors have utilized past or current professional or personal networks to come upon a research project. These patterns of scoping out research,

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and of being drawn into research questions, show just how engaged FUGuE researchers are in their communities. Second, the chapters have a refreshing sense of self-reflection, as researchers honestly pursue assumptions and interests and just as honestly report the impact of the work on their own professional and academic practice.

Third, and flowing from these two points made above, there is a very strong sense in these chapters that these researchers are not just writing for publication. They are not just ticking off publishing plans, or meeting research performance criteria, but are wholly and deeply engaged in the research process. This work means a lot to these researchers, despite all of the pressures in modern academia to publish and produce at ever faster rates. These are voices from the geographical and academic edge, but the authors work to realign and recentre our starting point. These chapters upset the usual notions of centre and margin, reconfiguring the metaphor by placing their communities of subjects and researchers as a new centre.

Finally, the work is avowedly Feminist, undertaken almost completely by women researchers and quite a few of those at more junior levels of lecturer and senior lecturer. This is perhaps not unprecedented in the education discipline, but it does mark out a distinctive feature of the collection.

FUGuE researchers have produced this work with limited resources, coming out of a peripheral institutional and academic location, and without the benefit of the formal and informal networks that underpin some of our larger capital city Universities. But as the Introduction itself notes, the emerging Research Impact and Engagement agenda may well work in favour of this method of working. That agenda has the potential to be more sympathetic to the objectives pursued by the group. It strikes me then that the impact agenda—building knowledge, engagement and working in partnerships—is a vital area for the FUGuE group to pursue. FUGuE researchers could profitably develop their engagement agenda, for the benefit of their own research, their research partners, and a wider range of stakeholders. This collection itself is tangible evidence of their ambition in this regard.

On the cusp of dramatic change in the Gippsland region, the book's researchers have shown us through their diverse and engaged work that amidst the challenges, the injustices and the difficulties, there is hope, a self-generated capacity, and committed action to confront the major issues and offer a fresh vision and pathway towards a successful region. Given our interconnected regional and global challenges, and given the overwhelming issues that we confront, this timely story from a region in south-eastern Australia is one that offers all of us hope for a better future.

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