

**Teaching Critical Reflection using a 4Cs Approach:
A Multimethod Study of Two Secondary Classes**

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A thesis submitted to fulfil requirements for the degree of
Doctor of Philosophy

Sydney School of Education and Social Work
Faculty of Arts and Social Sciences
The University of Sydney

December 2024

This research reported in this thesis was supported by the award of a Research Training Program scholarship to the PhD Candidate. No content produced by generative AI tools has been used in the preparation of this thesis.

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Date: 31st of December 2024

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Dedication

To my mother, Eleftheria, my light. You are glorious in every way.

To my loving parents, Eleftheria and Jim. Your combined love and support have paved my research journey. I am eternally grateful to be your daughter.

To my brother, Evan. You are brilliant and I am so proud of the man you have become.

Acknowledgements

My PhD journey has been a tumultuous one. Having begun my studies at the start of a global pandemic, I was hesitant to say the least. There are many people who supported me in this journey and helped me to navigate the uncertainty, pave a path forward, and celebrate my progress. Thank you first and foremost to my two supervisors, Professor Michael Anderson and Dr Alison Grove O’Grady, for your guidance and encouragement. Your combined expertise and insight about school transformation were invaluable in shaping my understanding of how critical reflection can be taught in schools. I deeply appreciate your time and contributions to our team meetings, countless check-ins, emails, and phone conversations.

I would like to extend my thanks and appreciation to my colleague and friend, Dr Jen Scott Curwood, for motivating and supporting me to seize new and exciting research opportunities during my candidature. Thank you for attending my first conference alongside me and being a confidant during challenging times. Thank you to my colleague, Karly Lazarou, for your friendship throughout this journey. I wish you all the best on the beginning of your PhD journey. My gratitude goes out to Jamie Gerlach and the entire 4C Transformative Learning team for your assistance in this research. Thank you to all the teacher participants and students who volunteered their time as part of this research during a very challenging teaching period in NSW schools. This research would not exist without you.

To my Student Services faculty team, my teaching family and home away from home. Thank you to everyone who shared in my challenges, achievements, and PhD journey. I appreciate you all. To my adoring and wonderful friends, Maheen Syed, Linda Yu, Sally Liu, and Natalie Toms. Thank you for being there to celebrate my achievements, hearing my rants, and

providing a shoulder to cry on. Your friendship is very special to me, and I am eternally grateful to have you all in my life. To my loving family, my rock. Thank you to my brother, Evan Papaefstathiou, for the belly laughs, talks, and for simply being there when I needed you. Thank you to my father, Jim Papaefstathiou, for supporting me and providing your wisdom. A special thank you must be reserved for my mother, Eleftheria Papaefstathiou, without whom I would not be here. Thank you for supporting me so that I could chase my dreams and climb this mountain. I love you very much, mum.

Abstract

Critical reflection is a necessary capability that positively transforms the way people see, act, and think for the social good. However, many secondary educators experience doubt when conceptualising this phenomenon and effectively teaching it. This study originated in response to this need, and to provide a roadmap for secondary teachers to understand, plan and program, and deliver critically reflective teaching and learning. By providing this roadmap for critical reflection, this study offers a novel contribution to the field of transformative educational research that seeks to develop a pedagogy of critical reflection that can inform how this capability is imagined, taught, and used to transform Australian schools.

This study focused on how critical reflection was fostered in Australian Stage 4 (Year 8) secondary classrooms, with the aim of exploring the relationship between critical reflection and poetry, a creative tool that was used to facilitate critical reflection. Moonstone High School [HS], located in Wollongong, New South Wales [NSW], was chosen using purposive sampling for inclusion in this study due to its adoption of a transformative pedagogical framework that advocates the practise of critical reflection, known as the 4Cs (Jefferson & Anderson, 2017, 2021a). The 4Cs approach shapes how critical reflection is taught at Moonstone HS, and underpinned how critical reflection is theorised in this study. A phenomenological multimethod and multicase study that combined two qualitative research methodologies, namely, hermeneutic phenomenology and poetic inquiry, were adopted to answer the research questions. Four secondary teachers and 49 Year 8 students partook in the study, where teachers designed and delivered units of work aimed at fostering critical reflection. The two classes, Year 8 English and Year 8 Geography, formed the two cases featured in this multicase study.

The study was conducted in three phases that corresponded chronologically to the phases of unit planning, delivery, and data collection that structured this research. Phase One featured the initial teacher interviews; Phase Two featured the fieldwork that took place when teaching began; and Phase Three featured the final teacher interviews. Qualitative data was collected using data crystallisation, through the inclusion of semi-structured interviews, *in-situ* student interviews, observational field notes, and artifacts. Interpretive Phenomenological Analysis [IPA] (Smith et al., 2009) was used to analyse the interview and observational data, whilst a modified form of low-level thematic analysis (Dawadi, 2020) was employed to analyse the artifacts collected in this study.

The findings from each phase of the study foreground the various creative, collaborative, and provocative ways that critical reflection can be fostered in the Stage 4 classroom. The findings from Phase One of the study suggest that adequately supporting students to critically reflect is vital for successful learning. Critical reflection is driven by the questions posed by students and those curated by teachers, to promote learning that is purposeful and deep. Narrative is also highlighted as a powerful medium for perspective-taking and critical reflection. Phase Two of the study reveals how posing the right questions can nurture such purposeful and deep learning, whilst forging a cohesive group dynamic in the classroom enables critical conversations to flourish. Notably, the use of provocations in the classroom sparks critical reflection using multiple and thought-provoking stimuli. Finally, Phase Three of the study highlights the use of poetry as a creative and dynamic tool for critical reflection, with the potential to be employed both as a stimulus for reflection and a medium through which critical reflection can occur. The power of diverse perspectives is revealed here as a conduit for effective critical reflection, whilst the notion that students must enter ‘the learning pit’ (Nottingham, 2016) to critically reflect is proposed.

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Glossary

The following definitions are compiled for key terms referred to throughout this thesis.

Agency:

This word is rooted in sociology and refers to an individual's ability to change their circumstances through intentional actions. Individuals exercise agency to make decisions, take initiative, and exert control over their personal circumstances to fulfil their needs.

Bridling:

In phenomenological research, the term 'bridling' refers to the act of adopting a reflective and open attitude to understanding a phenomenon during a research study. As Dahlberg (2022, p. 1023) argues, 'bridling' is a "balancing act" between what the researcher already knows and what meaning they allow the phenomenon to reveal to them during the research process.

Coherence maker:

A visual metaphor that is used to 'make coherence' of the capability being taught. For example, the *critical reflection Crucible* is a coherence maker that adopts the metaphor of a scientific crucible to visualise the process of critical reflection, as a capability imagined in Jefferson and Anderson's (2017) 4Cs approach.

Critical reflection:

The process of identifying, challenging, and re-solving our assumptions about our world, to better understand the relationship between power, agency and knowledge. This process involves confronting the agency that we hold as individuals, but also

recognising the hidden systems of power that shape our everyday lives, experiences, and actions.

Critical thinking:

The evaluative process of identifying and analysing our assumptions, actions, and experiences, and the relationship between them.

Experience:

An experience is characterised as an event or ‘happening’ that occurs in an individual’s consciousness, which can be observed or understood through the stories that people tell us about their lives (Kafle, 2013, p. 188).

Found poetry:

A poem that is created by taking existing text, re-ordering, and editing it to represent research data (Robinson, 2022, p. 71). Found poems can be seen as the literary equivalent of a collage, as they allow the researcher to piece together and illuminate the research data (usually verbatim interview transcripts) using poetic form (Robinson, 2022, p. 71).

Hegemony:

This term was originally coined by Antonio Gramsci (1999/1971) in his prison notebooks. Apple (2004, pp. 3-4) conceptualises this term within an educational context as a dominant and effective structure of meanings, actions, and values “that are lived” in a such way that they saturate society in deceptive ways.

Hermeneutic Phenomenology:

A branch of phenomenology whose philosophical origins stem from the work of Martin Heidegger. A hermeneutic approach frames the exploration of a phenomenon through the interpretation of the observer’s lived experience.

Intentionality:

This refers to the intentional relationship between a subject (the conscious individual) and an object (the mental phenomenon). Nagel (1974, p. 1) argues that because intentionality is difficult to define, it can be understood as the “meaning link” that binds humans to their surroundings.

Interpretive Phenomenological Analysis [IPA]:

This is a richly detailed method of qualitative data analysis that draws upon a hermeneutic phenomenological framework to interpret the data derived from the investigated phenomenon.

Multicase study:

A research design that centres around the organisation of multiple cases (i.e. individuals, groups, or settings) that seek to represent the *quintain* (the binding phenomenon, concept or idea) under investigation.

Multi-perspectivist:

A descriptive quality assigned to the study of knowledge through the lens of two or more assumptions, narratives or perspectives that enrich or conflict each other.

Narrative:

A textual account (spoken or written) that details experiences or events, either fictional or non-fictional in nature. The term ‘narrative’ is imagined in this thesis through a phenomenological lens to account for the dynamic meaning-making venture between the narrative and the responder (Iser, 1978; Lobo, 2013).

Participant-voiced poetry:

Poems that are created by research participants, which are then read, analysed, and represented as qualitative data by the researcher.

Poetic inquiry:

A qualitative research method that sits within the category of arts-based research, which adopts poetry as an expression, representation, and means of qualitative data.

The 4C capabilities:

Creativity, critical reflection, communication, and collaboration (Jefferson & Anderson, 2017, p. 43).

The 4Cs approach:

A framework for transformative education developed by Miranda Jefferson and Michael Anderson (2017, 2021a) that centres around the relationship between four interrelated capabilities (the 4Cs) and the pedagogies that bind them.

The Learning Disposition Wheel [LDW]:

The Learning Disposition Wheel is a “diagnostic and assessment tool” focused around three dimensions, namely: the cognitive, intrapersonal, and interpersonal (Jefferson & Anderson, 2017, p. 40). Each dimension is comprised of three competencies (for example, the intrapersonal dimension consists of *focus*, *grit* and *curiosity*). When all nine competencies are taught in combination, students form a disposition for learning that is self-regulated, transformative, and considerate of their social and emotional wellbeing.

Transformative Learning Theory [TLT]:

A theory of learning based upon a child or adult’s capacity to modify their thinking by critically reflecting on their individual experiences and the preconceptions that they hold about the world.

Voice:

This term refers to the perspective through which a narrative is told. The specific meaning of this word is rooted in Wolfgang Iser’s (1978) reader-response criticism,

where he conceptualises 'voice' both as a medium for communication and a tool for shaping the responder's interpretation of a narrative text.

Abbreviations

ACARA	Australian Curriculum, Assessment and Reporting Authority
AITSL	Australian Institute for Teaching and School Leadership
4Cs	Communication, Collaboration, Creativity and Critical Reflection
CESE	Centre for Education Statistics and Evaluation
EAL/D	English as an Additional Language or Dialect
HPGE	High Potential and Gifted Education
HREC	Human Research Ethics Committee
HS	High School
HSIE	Human Society and Its Environment
IPA	Interpretive Phenomenological Analysis
KLA	Key Learning Area
LBOTE	Language Background Other than English
LDW	Learning Disposition Wheel
NESA	New South Wales Education Standards Authority
NSW	New South Wales
NSWDOE	New South Wales Department of Education
PEEL	Point, Evidence, Explain, Link
QTM	Quality Teaching Model
3Rs	Reading, Writing, Arithmetic
SERAP	State Education Research Applications Process
SLSO	School Learning Support Officer
SDT	Self Determination Theory
TLT	Transformative Learning Theory
ZPD	Zone of Proximal Development

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Chapter One: The Introduction

1.1 Overview

Critical reflection is a transformative capability that has been studied and practised for centuries to positively inform the way humans think and act across personal and professional domains. The philosophical origins of critical reflection can be traced back to the writings about Athenian philosopher Socrates and his Socratic Method of deep questioning (Paul & Elder, 2010) to stimulate critical thinking. More recently, 20th-century scholars like John Dewey (1997/1910) and Donald Schön (1992) offer a theoretical framework for its practical application in modern professions. In an educational context, critical reflection is esteemed and taught in teacher-education settings where the professionalisation of the teaching profession has obliged educators to continually reflect on their practice to deliver quality teaching and learning experiences for their students.

Significantly, the notion that adolescents can also practise critical reflection to achieve greater self-awareness and agency by questioning and challenging their assumptions in secondary educational settings has seldom been considered. Practising critical reflection as a young person in today's world has become more crucial than ever. For high-school aged learners, critical reflection enhances their ability to take the information they are learning and view it through an analytical and evaluative lens to question, consider, and validate this knowledge. By doing so, students nurture their inquisitive minds as they query their prior learning and experiences, digging deeper into the unexamined assumptions that have been shaped by their upbringing and educational background as adolescents. Critical reflection supports students' personal growth, nurturing their social and emotional learning, and fosters a willingness to look inwardly to consider the values and beliefs they hold true. A student who can critically reflect

is one who possesses the critical consciousness to navigate the chaos, complexity, and contradiction (Sardar, 2010) posed by today's society and shape their actions for the social good.

1.2 The Impetus for this Study

This study was borne from my prior research into this subject as an honours student when completing my undergraduate studies in the combined secondary education and arts degree at The University of Sydney. During my penultimate year of study, I was exposed to a new framework for transformative learning known as the 4Cs (Jefferson & Anderson, 2017, 2021a) that was jointly conceived by my lead supervisor Professor Michael Anderson and his colleague Dr Miranda Jefferson. Although the notion of the '4 Cs' exists and was popularised by the US based organisation, P21, in their *Framework for 21st Century Learning* (Battelle for Kids, 2019), the 4C Transformative Learning framework offered by Jefferson and Anderson (2017, 2021a) presented critical reflection in place of critical thinking as a key capability. This excited me as a pre-service teacher, as Jefferson and Anderson's (2017) 4Cs approach framed critical reflection as a capability that was meaningful, complex, knowable, and teachable. Being a new approach that was still in its implementation phase in New South Wales schools at the time, teachers adopting the 4Cs were still coming to terms with critical reflection conceptually and how it could be imagined and taught in their classrooms. Consequently, my honours research led to me define critical reflection as a complex phenomenon that can be fostered through questioning strategies for primary school-aged students in Australian schools (Papaefstathiou & O'Grady, 2022).

My honours research (Papaefstathiou & O'Grady, 2022) became the impetus for this thesis, as it compelled me to consider the creative possibilities offered by a pedagogy of critical reflection

for teachers and students in Australian primary and secondary schools who adopt Jefferson and Anderson's 4Cs approach (2017, 2021a) for school transformation. I wish to extend upon my previous research (Papaefstathiou & O'Grady, 2022) to establish a pedagogical roadmap for Australian secondary educators who wish to teach critical reflection using a 4Cs approach. By examining how critical reflection is theorised and fostered by secondary educators who have adopted the 4Cs approach (Jefferson & Anderson, 2017, 2021a) in their classrooms, this study will uncover how critical reflection can be practised as a teachable, knowable, and transferrable capability in Australian secondary schools.

My work as a beginning secondary English teacher and writer of poetry has also shaped my poetic exploration of critical reflection in this thesis. As I observe how critical reflection is taught in this study, I wish to challenge the teacher participants to experiment with poetry as a creative and reflective tool, to support their students to critically reflect in their secondary classrooms. I believe that poetry has a transformative potential, as an expressive medium that allows humans to bear their souls and convey the idiosyncrasies of their human experience through verse. This is something I have profoundly witnessed as a teacher of students from refugee backgrounds who have used poetry to reflect on their experiences of settling in Australia in recent years. As a qualitative researcher, my desire to incorporate poetry into my methodology pays homage to the reflective and creative possibilities that poetry holds when communicating the individual experiences of the teachers and students in this study.

1.3 Purpose and Aims

The purpose of this study is to explore how critical reflection can be taught creatively and through a multi-perspectivist lens to foster transformative learning experiences for Stage 4¹ teachers and students in a secondary school implementing the 4Cs approach. The study is informed by Jefferson and Anderson's (2017, 2021a) 4Cs approach, to discover how critical reflection, being one of the four Cs, is theorised, taught, and experienced by secondary teachers utilising this approach to experiment with poetry as a tool to facilitate critically reflective learning in their classrooms.

This study aims to uncover how the phenomenon of critical reflection is programmed, taught, and experienced by four secondary English and Geography teachers and their Year 8 students in an Australian high school implementing the 4Cs approach. This study defines critical reflection as a complex and observable phenomenon that is understood through the first-hand experiences of the teachers and students who cultivate it in their classrooms (Papaefstathiou & O'Grady, 2022). Thus, this study acknowledges that critical reflection is visibly demonstrated during teaching and learning through the questions, discourse, and learning artifacts that are produced in the classroom. In this study, the term 'multi-perspectivist' is used to capture the process of exposing students to perspectives that are dissimilar to their own to broaden their worldview and challenge them to critically reflect. This also acknowledges that for students to become critical and creative thinkers, they must understand how exposure to diverse perspectives offers avenues for critical thinking, critical reflection, and creativity.

¹ In Australian secondary schools, 'Stage 4' refers to the first two years of secondary schooling, namely, Years 7 and 8.

The desire to study how critical reflection is taught through a ‘multi-perspectivist’ lens is twofold. Firstly, this thesis embraces the phenomenological viewpoint that all knowledge is inherently subjective and framed through multiple perspectives and narratives that are constructed and shared to ascribe meaning to our world (Heidegger, 1962). To critically reflect, students must access these knowledge traditions to see how different versions of knowledge have been created, shared, and used to influence how we live, work, and learn as a society. Secondly, critical reflection cannot occur unless an individual encounters a perspective that is new, dissimilar or conflicting with their own. To attain a holistic view of a topic and explore it in a nuanced manner, students must view knowledge through more than one perspective, narrative or voice. This study promotes this notion by asking its teacher participants to foster critical reflection by presenting their curriculum knowledge through a multi-perspectivist lens so that this learning may flourish.

Furthermore, this thesis will focus on exploring the creative and reflective potential that poetry holds as an expressive medium to facilitate the critical reflection process for these students. My aspiration to use poetry in my teaching beyond the English classroom has intrigued me as a teacher for some time. My competency and experience with teaching poetry to English students has allowed me to study the poetic form alongside my students and apply it in traditional and experimental ways to achieve different learning objectives. As a writer of poetry, my ability to reflect through verse has been a privilege that I have used to craft narratives to uplift and empower the people in my life. It is my professional and personal relationship with poetry that has compelled me to bind it to critical reflection in this study, to observe how poetry can be used to facilitate critical reflection in creative ways.

1.4 Research Questions

The main research question that will inform and guide this study is:

How can critical reflection be imagined creatively in the Stage 4 classroom to support a multi-perspectivist approach to teaching and learning?

More specifically, this research question will respond to the following sub-questions:

- a. What are the experiences of Stage 4 students and educators involved in teaching and learning that seek to foster critical reflection?
- b. How can Stage 4 educators frame their teaching of curriculum knowledge through multiple perspectives, voices, and/or narratives to activate the critical reflection process?
- c. How can poetry be used as a creative tool to facilitate critical reflection during teaching and learning?

1.5 Significance

Our world is in a current state of uncertainty and upheaval. The perpetuation and ongoing threat of war and political instability, coupled with the burden of future global pandemics and the ever-present climate crisis, has made revisiting how we think and act more crucial than ever. Critical reflection has been foregrounded as a vital capability that is needed by 21st-century learners to navigate the complexities posed by their society (Jefferson & Anderson, 2017; Mezirow, 1998; Papaefstathiou & O'Grady, 2022). For instance, the climate crisis has presented ongoing challenges for our youth, with many young people questioning the actions needed to avert its long-term impacts. Therefore, the transformative possibilities offered by this capability when practised by adolescent learners in schools is paramount to securing future

generations of critically reflective learners who are equipped to live, learn, and work in our rapidly evolving world.

The theoretical basis for critical reflection as an observable and teachable phenomenon that can engender transformative learning for adolescents in schools has seldom been explored by the prevailing research literature. Numerous models and frameworks for practising critical reflection exist and are continually emerging in adult learning and professional settings including those offered by Ajayi (2011), Ash & Clayton (2009), Bassot (2016), Brookfield (1994, 2017), Clark et al. (2016), Fook & Gardener (2012), Fook et al. (2016), Larrivee (2000), Liu (2015, 2020), Mezirow (1998), Schön (1992), van Manen (1977), and Yost et al. (2000). Despite this, there is scarce research that offers a framework for critical reflection that can be clearly understood, adopted, and practised by teachers and adolescent students in secondary schools to achieve transformative learning outcomes. The 4Cs approach for transformative learning (Jefferson & Anderson, 2017, 2021a) offers such framework that has been adopted and implemented by Australian schools in recent years to promote a culture of critical reflection for teachers and students. This framework acknowledges the timeliness and relevance of school-aged students across primary and secondary settings learning how to conceptualise and practise critical reflection to examine, challenge and disrupt their assumptions to inform their current and future actions (Jefferson & Anderson, 2017, 2021a).

This study aims to bridge this gap and provide evidence for the practise of critical reflection amongst adolescents, more specifically, high-school aged students taught in some Australian high schools that adopt Jefferson and Anderson's (2017, 2021a) 4Cs approach. This study extends previous research conducted by Papaefstathiou and O'Grady (2022) that argues critical reflection as a complex phenomenon that is experienced by educators using questioning

strategies in an New South Wales [NSW] primary school that adopts the 4Cs approach. This study aims to define and conceptualise critical reflection as a capability that can be practised beyond exclusively adult education settings to establish the transformative possibilities that are welcomed when primary and secondary students critically reflect during learning (Papaefstathiou & O’Grady, 2022). Therefore, this study will add to a new and emerging research base for the teaching of critical reflection in primary and secondary educational settings in Australia.

Framing this thesis through a multicase research study that blends hermeneutic phenomenology and poetic inquiry as its main qualitative methods offers a fresh perspective and new insight into how educational research surrounding the phenomenon of critical reflection has been conducted. As demonstrated in the study by Papaefstathiou & O’Grady (2022), phenomenological research in educational contexts helps to elucidate and magnify the lived experiences of teachers and students who are engaged in critically reflective learning, as an observable and complex phenomenon that occurs in the classroom. Adopting the interpretive approach to phenomenology using Interpretive Phenomenological Analysis [IPA] (Smith et al., 2009) allows this research to conduct a detailed exploration into how critical reflection occurs during teaching and learning through the experiences of the teachers and students involved. As a phenomenological researcher, my role in the interpretive process allows me to communicate participant experiences of critical reflection in this study, both as a participant observer and an active interpreter of the qualitative data.

This thesis will offer a poetic voice that conveys the findings of this study in an accessible, penetrating, and multidimensional manner (Cahnmann, 2003, p. 29). This research explores how poetry can creatively engender critically reflective learning, using poetry as both a

stimulus for reflection and a reflective tool. Thus, poetic inquiry is a fitting methodology that allows this study to embrace the imaginative versatility of verse to communicate the experiences of its participants and enhance the representation of its findings. The process of synthesising verbatim interview transcripts into data poems using the advent of rhythm and line allows this study to represent its findings creatively. Similarly, the intricate process of noticing, reflecting, and arranging words into lines and stanzas to produce the data poems that feature in this thesis are aligned with the ideographic analysis undertaken by a researcher using an IPA approach. The poetry that has been produced by the student participants in this study contributes to the poetic artifacts that will enhance the representation of the qualitative findings of this thesis in a dynamic way.

This research offers a definitive picture of what critical reflection looks like when planned for and implemented during teaching and learning in a secondary, Stage 4 classroom. This will not only benefit educational researchers and teachers who have studied and adopted Jefferson and Anderson's approach (2017, 2021a) but will simultaneously validate the efficacy of this framework and pave the way for future studies in this arena. Consequently, teachers will perceive the connections between teaching and learning activities that prime students for critically reflective learning that are centred around the other three capabilities in the 4Cs approach, namely, communication, creativity, and collaboration. Furthermore, teachers of critical reflection will be offered practical strategies for how to build a classroom culture that embraces a disposition for learning that will engender critically reflective learning for students.

1.6 Limitations

Committing to an IPA approach imbues this study with an inherent richness in the analysis and understanding of the phenomenon of critical reflection. In doing so, this study aims for detailed

“understanding, rather than explanation” of the human experiences of the teacher and student participants who will engender and encounter this phenomenon in their classrooms (Mackey, 2005, p. 179). Yet, a potential limitation of using IPA lies in the interpersonal and interpretive nature of this phenomenological approach (Alase, 2017, p. 13; Smith, 2015, pp. 303-304). Smith et al. (2009, p. 36) contend that “IPA operates with a double hermeneutic,” which implies that phenomenon is interpreted twice, firstly by the participant as they articulate their account of the phenomenon, and secondly by the researcher as they attempt to make sense of the participant’s account. As this “double hermeneutic” is inescapable and will inevitably shape how the participant’s lived experience is interpreted and articulated by the researcher, this necessitates that caution is taken to report the participant’s account as authentically as possible (Smith, 2015). One way this has been mitigated is by undertaking a case-by-case analysis of the teacher and student participants’ experiences in each Year 8 class to “produce an interpretive analysis which is tied closely to the account coming from the participant” (Smith, 2015, p. 303). This ensures that the participant’s account of the phenomenon takes precedence and is present in the reporting of the research findings, which are then enhanced and illuminated through the subsequent interpretive analysis. An example of this is presented in the found poems produced, which feature at the start of each findings chapters that correlate to the three main phases of the study. These found poems were meticulously composed by taking verbatim interview transcripts and re-ordering them to create a new poem that attempts to convey the emotions inherent in the lived experiences of the participants in the study. To preserve the authenticity of the participants’ voices in these poems, the researcher minimised the level of manipulation to the transcript, seeking only to shape the participants’ words through the addition of punctuation and formatting where appropriate.

Since this study is limited to the exploration of critical reflection in a single Australian high school that exclusively adopts the 4Cs approach (Jefferson & Anderson, 2017, 2021a), this research is limited in the generalisability of its results. Jefferson and Anderson's 4Cs (2017, p. 48) approach offers educational researchers and teachers a dynamic and timely framework for how critical reflection can be understood and practised by both teachers and students in schools using "4C pedagogy." The nature and teaching of critical reflection as it is reported in this study will wholly be influenced by 4C pedagogy, thereby making it a precondition that teachers and schools adopt a 4Cs approach to practise critical reflection with their students to the same effect.

1.7 Contextualising the Study

The study was conducted in Moonstone High School [HS], a public and coeducational secondary school located in a coastal town in Wollongong, New South Wales. Moonstone HS was nominated for participation in this study as it had adopted and implemented Jefferson and Anderson's (2017, 2021a) 4Cs approach for four years with developing degrees of competence. Over the past four years, the school worked strongly to align its whole-school planning and procedures with the 4Cs framework, so that 4Cs practice was embedded and impactful at both a whole-school and classroom level. In its initial adoption stages, this included several training sessions delivered by the 4Cs Transformative Learning team that featured professional learning around 4Cs practice for the teachers and leadership team at Moonstone HS. This training enabled teaching staff to familiarise themselves with the theory underpinning Jefferson and Anderson's (2017, 2021a) 4Cs framework and learn how to imagine it in practice by understanding certain pedagogical tools and processes that align with this approach. This ensured that the teacher participants who were invited to participate in this study had a certain

level of background knowledge concerning the 4Cs and the notion of critical reflection as one of these capabilities before joining the study.

The decision to focus this study on the selected teacher and student participants from Moonstone HS was influenced by two main factors. Firstly, conducting a multicase study around two Year 8 classes and their respective teachers from a single high school enabled a deeper exploration of the phenomenon of critical reflection as it emerged during learning across both classrooms. Significantly, a smaller participant sample size is favourable for phenomenological research studies of this scope, as it allows for a richer and more thoughtful exploration of the experiences of the teacher and student participants (Smith et al., 2009, p. 51). Additionally, the recruitment process was inhibited by various external challenges since ethical approval and recruitment took place during the height of the COVID-19 pandemic. Consequently, this limited the number of prospective high schools in NSW that were willing and able to participate in a research study after having emerged from a prolonged and challenging period of remote learning due to mandated state-wide lockdowns. These external pressures were taken into consideration and influenced the design of the study so that teacher participants were provided with as much support as possible to partake in this study during such a tumultuous period for NSW schools. For example, the planning phase not only inducted the teacher participants into the study as a cohort, but also assisted them in their preparation for the teaching they were delivering to their respective Year 8 classes throughout the study.

1.8 Year 8 English with Dominique, Jeremy, and Marcus

This Year 8 English enrichment class is comprised of 27 students. There were no students from Aboriginal or Torres Strait Islander backgrounds recorded in this class. Although some students spoke languages in addition to English at home, there were no recorded learners who required support to learn English as an Additional Language or Dialect [EAL/D]. The enrichment class offers students the opportunity to deepen their experience of learning English, with a focus on developing their critical literacy skills when approaching English textual analysis.

Dominique and Jeremy share their teaching of this English class collaborated with Marcus to adapt a short poetry-focused unit of work around the concept of Australian identity for this study. Teaching on this unit began during Week 5 of Term 2, 2022 and ran until the end of the term. Although Marcus did not teach this English class, he participated in and co-taught lessons alongside Dominique to help foster critical reflection with these students. Many students in this class were reluctant to participate in group work that took them out of their comfort zones and challenged them to work with new people. Marcus and Dominique introduced various activities to help students get acquainted and begin working more cohesively as a group. As males outnumbered females in this class, male voices tended to dominate classroom discussions. Having observed this, Dominique sought to build confidence amongst the female students and support them to find their voice in group learning situations.

1.8.1 Teacher Spotlight

Dominique Costa is an experienced English teacher who works closely with the school welfare team and prides herself on the strong rapport that she has built with the learners in this class. Dominique was the Girls Advisor at Moonstone HS at the time of this study and has previously led teaching and learning groups (now discontinued) with teachers at Moonstone

HS. Although Dominique had not completed her 4Cs professional learning, she approached the study with a willingness to learn and experiment with strategies to promote critical reflection in her classroom. Dominique has taught mixed ability and lower ability English classes but was excited by the prospect of challenging these students to approach texts about Australian identity from critical perspectives as part of the study.

Jeremy Webb is an experienced English teacher who also has experience teaching both English, Human Society and Its Environment (HSIE) and Mathematics classes at Moonstone HS. Although Jeremy received minimal 4Cs professional learning and was new to the 4Cs approach, he displayed a willingness to learn and trial different processes that were used to promote critically reflective learning with his students.

Marcus Kazan is an experienced English teacher who led and supported 4Cs professional learning for teachers at Moonstone HS. Marcus is passionate about the transformation his school has undergone since first adopting the 4Cs at a whole-school level and works to embed 4Cs practice in every classroom. Marcus firmly believes in the power of the metacognitive framework offered by the 4Cs approach and how this fits with the school culture, teacher practice, and student wellbeing.

1.9 Year 8 Geography with Violet

This Year 8 Geography class has 22 students of mixed learning abilities. Selected students in this class received individualised support from a School Learning and Support Officer [SLSO] where needed. There were no students from Aboriginal or Torres Strait Islander backgrounds recorded in this class. Although some students spoke languages in addition to English at home, there were no recorded EAL/D learners in this class. The unit of work that was adapted for this

study was titled ‘Interconnections’, with a focus on tourism and examining the impacts of tourism through the lens of global citizenship. Teaching on this unit began from the end of Week 5 of Term 2, 2022 and ran until the end of the term. Violet was the sole teacher of this class and approached the study with unwavering enthusiasm at the prospect of experimenting with poetry to foster critical reflection with her students.

Students in this class were familiar with various 4Cs processes, which became apparent through the routine way in which they participated in these learning processes during a lesson. As a group, the students in this class were good collaborators, thoughtful communicators, and were adept at activities which required deep noticing skills. Violet introduced the critical reflection Crucible coherence maker as a learning tool in a very tangible way to enrich students’ study of tourism and bring their attention to their role as ‘responsible tourists’. This meant that the Crucible was visible in the classroom during the lesson and featured in learning activities which were aimed at promoting critical reflection. Students were also encouraged to draw and personalise their own Crucibles, which were then applied to learning activities to support students to challenge an assumption about their topic. Conceptual thinking was challenging for this class, as students were still developing their confidence to identify and articulate their own assumptions in a group setting.

1.9.1 Teacher Spotlight

Violet Williams is an early career HSIE teacher at Moonstone HS. At the time of this study, Violet was part of the Future Focused team and was an early adopter of 4Cs practice at this school. Violet was fortunate to work with the 4Cs Transformative Learning team and engaged deeply with the literature that informs the 4Cs approach. Violet is a passionate Geography, History, and Psychology teacher who routinely used the 4Cs as part of her teaching practice in

the classroom. During this study, Violet experimented with various 4Cs processes to prime students for critically reflective learning, many of which supported students to communicate in group settings to voice ideas, express their opinions, and confront challenging perspectives together.

1.10 Chapter Previews

Chapter Two: The Literature Review

Chapter two provides a thematic overview of the literature surrounding critical reflection and its theoretical origins and practical applications both in the field of education and other professions that adopt or explore critically reflective practice. The chapter begins by considering the cognitive conditions necessary for practising critical reflection, drawing on research from scholars including Dewey (1997/1910), Schön (1992), Van Manen (1977), Mezirow (1990), and Brookfield (2017). The chapter then explores the relationship between critical reflection and assumption-taking, as well as the possibility of assessing how and if critical reflection is taking place. The 4Cs approach (Jefferson & Anderson, 2017, 2021a) as a pedagogical framework is introduced and its application of critical reflection as a transformative and agentic capability for learners in schools is explored. Additionally, the links between creativity and critical reflection are analysed and related to the art of composing poetry or poetic reflection to foster critical reflection. The relationship between critical thinking and critical reflection is problematised and explored in this chapter, as critical reflection is defined as a ‘hidden’ phenomenon. The next section of this chapter explores the pedagogies significant to critical reflection and how they assist in laying the foundation for this capability to manifest during teaching and learning. This includes an understanding of agency, empathy, and social and emotional learning. The final section of this chapter identifies and addresses the potential challenges faced by educators when teaching critical reflection.

Chapter Three: Methodology

This chapter defines and discusses the multimethod research design adopted in this study that blends hermeneutic phenomenology and poetic inquiry to address the main research question and sub questions. Chapter Three begins with an overview of the multimethod design, with a specific focus on each of the two qualitative methodologies being used. A case for conducting multicase research in this study is similarly put forth and considered in light of the site selection and research participants. The nature of the school site and the overall recruitment process is then outlined, as well as the criteria for teacher-participant recruitment and ethical approval for conducting human research within an NSW high school. The next half of the chapter details the data collection methods employed in the study, including the use of semi-structured interviews, *in-situ* student interviews, observational data, and artifacts. Subsequently, the approaches for data analysis are introduced and problematised, namely, the use of IPA and low-level thematic analysis.

Chapters Four to Six: Findings

The study was conducted in three main phases: the initial teacher interviews (Phase One), fieldwork and classroom observations (Phase Two), and the final teacher interviews (Phase Three). The following three chapters communicate the study's findings and subsequent analysis of each of the three phases of the study. Each chapter begins with a found poem that attempts to capture the phenomenological "essence" (existence or the capacity 'to be') of the teacher and student experiences of critical reflection during teaching and learning in the Year 8 English and Geography classroom (Heidegger, 1962, p. 42).

Chapter Four: Phase One Findings

The first phase of the study begins with a found poem titled *First Impressions*, which as the title suggests, conveys the teacher participants' first impressions as they undertook the initial interviews with the researcher via Zoom. This found poem was composed using interview quotes tabulated in Master Table A, which were used to evidence the six superordinate themes that resulted from this phase of the study. The chapter then explains the reflective process undertaken by the researcher when constructing the poem and how its composition aligns with both the IPA approach and the poetic inquiry methodology adopted. Following this, the chapter outlines the aims of the initial interviews and assumes a reflexive stance to describe how they 'bracketed' their preconceptions before proceeding with these teacher interviews. These reflections are communicated to the reader using first-person 'I' statements lifted from the researcher's field diary. This chapter then provides an overview of the IPA approach undertaken to produce the six superordinate themes featured in Master Table A, which are then presented as the main findings in this phase. An analysis of each theme is offered and supported using verbatim quotes from the teacher participants' interview transcripts.

Chapter Five: Phase Two Findings

Chapter Five relates the findings from Phase Two of the study which begins with a found poem titled *Tourism kills tourism*. This found poem pieces together dialogue collated from field notes taken during a lesson observation that captures a critically reflective learning sequence that occurred during one of Violet's Year 8 Geography lessons. The resulting discussion rationalises the poem's composition and offers a phenomenological reflection of how the researcher employed their own poetic voice to highlight the nuances of this observational experience through poetry. The chapter then outlines the planning session that took place between the researcher and teacher participants to explore 4C pedagogy surrounding critical reflection and

plan the unit of works that teachers will deliver to the two Year 8 classes involved in the study. The process of carrying out the lesson observations at Moonstone HS is described and the IPA approach adopted to create Master Table B, which showcases the seven superordinate themes, is detailed for the reader. These main findings are then discussed, analysed, and evidenced using observation notes quoted from the researcher's field diary, as well as artifacts (student poems and work samples) that illustrate the critically reflective student learning that occurred during this phase of the study.

Chapter Six: Phase Three Findings

Chapter Six details the third and final phase of the study: the final teacher interviews. This chapter begins with a found poem titled *Critical reflections, Connections, and the Ticking Clock*. This poem was constructed using the quotes compiled in Master Table C, which evidence the seven superordinate themes that resulted from this phase of the study. The poem conveys a sense of urgency for the practice of critical reflection in classrooms, but also represents time as a conflicting force that drives a wedge between what teachers desire to accomplish and what is achievable in the scope of a lesson. Subsequently, the findings are presented to the reader, including a detailed breakdown of the IPA process undertaken to produce the final superordinate themes. These themes structure the analysis the forthcoming analysis, which also offers a rich introspection into the personal journey of certain participants from the commencement to the conclusion of the study.

Chapter Seven: Conclusions

Chapter Seven is the final chapter of this thesis that offers a synthesis and summary of the conclusions generated from each phase of this research study. The chapter begins with an overview of the study and orients itself through the re-stating of the research question. The

chapter is then divided into three sections that correlate to the three phases of the study. Each section offers a sequential overview of the research conducted at each phase of the study, as well as a summary of the data collection methods, data analysis, and the qualitative findings. Sequentially, three main conclusions for each phase of the study are presented, with six conclusions being offered in total. The limitations of the study are then summarised. The final section of the study reveals the implications of this research for both educational scholars and practising educators who wish to teach critical reflection and discusses the directions for impending research.

Chapter Two: The Literature Review

2.1 Chapter Introduction

This chapter offers a thematic synthesis and appraisal of the literature connected to the phenomenon of critical reflection. To understand this phenomenon and how it manifests in the minds of those who practise it, the theoretical origins of reflective practice will be first examined. Reflective theorists and practitioners including John Dewey (1997/1910), Max van Manen (1977), and more recently Donald Schön (1992) and Stephen Brookfield (2017), are valuable additions to the ongoing epistemological debate regarding reflective practice and how this can be enriched by and extended through critical reflection. Sociological scholars like Jack Mezirow (1990, 1997/1910) assert the transformative potential of critical reflection and its role in demystifying assumptions and developing critical consciousness (Freire, 2005a/1974) through perspective-taking (Mezirow, 1990; Rios et al., 2003; Southworth, 2022). These considerations include the role of assumptions, and how the process and outcome of critical reflection as a transformative capability can be imagined. Critical reflection is then explored in the context of the 4Cs transformative learning framework coined by Jefferson and Anderson (2017, 2021a) and positioned as an agentic, creative, and dynamic capability that can be both experienced and taught by educators and learners alike using related pedagogies in classrooms. Whilst critical reflection is a generally new capability to educators in schools, the chapter closes by discussing the challenges that may arise when teaching critical reflection and how these can be addressed.

2.2 Reflective Practice: The Conditions Necessary for Critically Reflective Learning

As a mental phenomenon, critical reflection is steeped in reflective epistemologies that provide the rationale for *why* and *how* we think (Dewey, 1997; Hatton & Smith, 1995; Schön, 2016;

Van Manen, 1977). Understanding the reflective dimension of critical reflection is pivotal, as this metacognitive process allows the phenomenon to manifest in the mind of the learner and be brought into their consciousness (Heidegger, 1962). This metacognition lies in the thinking process the learner undergoes to identify their assumptions and question these assumptions more deeply. As Fook (2007) asserts, critical reflection begins with the individual's experience (the learner) and their actions within the social world. The concept of reflective practice for educators was popularised by the work of Schön (1992), who offered theories for how teachers can routinely reflect both during and after a pedagogical experience, to situate their practice in their actions, behaviours, and assumptions. Reflective practice must also be facilitated for students during learning, so that they imbue meaning into their learning of the curriculum, rather than viewing it as a sequence of disconnected content and experiences.

Viewing learning as meaningful, continuous, and purposeful is a core belief that informs both the 4Cs approach (Jefferson & Anderson, 2017) and the Centre for Education Statistics and Evaluation [CESE] (2020) *What works best* evidence-based teaching practices and must be placed at the forefront of teacher planning and delivery in schools. As Hoyrup (2004) contends, one of the attributes of critical reflection is its questioning focus, which provokes learners to probe their uncritical acceptance of taken-for-granted knowledge. However, to enter this questioning phase, the individual must first practice reflective thought to pinpoint the beliefs they wish to ponder more deeply.

The production of a thought denotes that we believe something, whether or not it is accepted as truth by others (Dewey, 1997). Since a thought can also be identified as anything that we sense or that comes to mind, discriminating our thoughts by the beliefs they rest upon paves the way for reflection and by extension, critical reflection (Dewey, 1997/1910, p. 2).

Individuals will choose which beliefs they ground in empirical evidence and which they will uncritically accept, as our thought process is subject to what we value (Dewey, 1997/1910, p. 5). As a result, the implications of holding certain beliefs manifests in our behaviours and actions, causing individuals to “consider the grounds or reasons of their belief and its logical consequences” (Dewey, 1997/1910, p. 5). If they do not practise critical reflection, students will grow-up with unexamined assumptions and “without reference to the attainment of the correct belief” about how the broader political, economic, and social aspects of society operate (Dewey, 1997/1910, p. 5).

Prejudices can become especially worrying here, as certain prejudgements about individuals or cultural groups can fuel racism and forms of oppression within the school community. Social perspective taking is a pedagogic tool that can mitigate this, as illuminated by a qualitative study conducted by Rios et al. (2003). This form of learning is rooted in Mezirow’s (1990) original conception of perspective taking as the ability to recognise and understand another’s worldview by exercising empathy and critical curiosity when encountering their experiences. The aim of the social perspective taking activity that frames this study examines how critically reflecting about narratives that depict ‘otherness’ can prompt preservice teachers to develop cultural consciousness about the explicit connections between [their] “ideology and practice, as they relate to issues of race, class, ethnicity and gender” (Rios et al., 2003). The preservice teacher participants in this study were asked to listen to two professionals recite their classroom experiences of exclusion and struggle when learning English as a second language at school (Rios et al., 2003). Participants then chose a professional to use as the basis for a letter-writing activity by adopting their professional’s perspective as a student to compose this letter. Once completed, these roles were reversed, so that the letters were randomly assigned and read by the preservice teachers, who were then prompted to consider how they would feel if they

received this letter from a student in their class. The emotionality and opportunity for deep learning that can be derived from this perspective taking activity is clear, yet teachers must be vigilant when implementing this activity with their Stage 4 students.

Despite the success that can be achieved through perspective taking exercises such as this, Rios et al. (2003) caution that some learners may exhibit a resistance to viewpoints that contradict their own, thereby inhibiting the critical reflection process. As a teacher-researcher, this limitation implies that neither I nor my teacher-participants can compel students into adopting another perspective, but instead offer them the reflective tools to arrive at renewed understanding themselves. By doing so, students are entrusted with greater agency and independence as they choose what to believe and determine how this knowledge will impact their lives and the people around them. This task is inherently complex and will involve many unexpected results for teachers, especially when adopting perspective taking activities to uncover assumptions about race and racism in their subject areas. Brookfield (2017, p. 208) similarly recognises the enormity of this undertaking, by acknowledging that “one of the biggest problems in fostering critical conversation[s] on race is struggling to see the world through a fundamentally different racial lens.” For many students, their initial conceptions about racial diversity begin in the classroom through the people they meet and the knowledge they explore. My own schooling experiences affirm this point, as the way that I saw the world when I first entered university was ultimately shaped by my learning experiences in a multicultural high school where 95 percent of students (including myself) had language background/s other than English (LBOTE). Furthermore, for students who have not experienced or witnessed racism firsthand, it will be challenging for them to grasp the enormity and pervasiveness of racism in our everyday lives unless teachers actively unveil this perspective to them through their pedagogy.

As Brookfield (2017) foregrounds, it is vexing for people to consider that they might be a racist person or have perpetuated racism in some way during their lifetime, let alone come to this realisation in front of their peers and teachers. Part of the complexity lies in the way that we teach racism to our students, as we must find the language to communicate to learners that words like “racist and racism are used to describe the systems and structures that teach and reproduce beliefs and behaviours designed to keep a racially exclusive system intact” (Brookfield, 2017, p. 210). If students are offered the tools to understand *why* and *how* racist ideology is brought to life, they can better appreciate the perspectives of racial minorities and people impacted by racism when addressing such topics with their teachers through critical reflection. Adopting the teaching of racism as an example here allows us to observe that there are multiple factors that must be considered when teaching critical reflection about such forms of ‘controversial knowledge’ in the Stage 4 classroom.

2.3 Understanding Assumptions and the Importance of Dwelling in Uncertainty

It is the metacognitive process of coming to terms with one’s assumptions about knowledge that forms an intrinsic part of critical reflection. Reflection can take two forms here: individual reflection that occurs intrapersonally or reflexively (within the individual’s mind) and reflection that occurs socially (through interaction and communication with others) (Dewey, 1997/1910). The assumptions that learners bring to the classroom employ both forms of reflection, and crucially become the kindle that fuels the critical reflection process. As stipulated by Mezirow (1997), an individual’s assumptions directly stem from their frame of reference, which encapsulates the experiences, preconceived ideas, belief systems, and stereotypes that they form through their interaction with the world. To facilitate the teaching of the critical reflection, educators must first consider where assumptions originate- including their own. As an innate part of our human experience, assumptions are informed by our

interactions with the micro, meso, and macro spheres of society (Johnson et al., 2014). The micro interactions that a learner forges with their environment both at home, school and within the broader community, shape their individual experience, and by extension, the assumptions they hold (Dewey, 2007). Similarly, through their understanding of the NSW Department of Education's Quality Teaching Model [QTM] (NSWDOE, 2024), educators across both the public and private schooling sectors acknowledge the enriching and transformative potential offered by the socio-cultural knowledge students possess because of these micro, meso, and macro interactions (Dewey, 2007). For example, the assumptions learners make about the world because of their exposure to social media platforms, inevitably influences how they interpret curriculum knowledge. As Gramsci (1999/1971, p. 180) affirms, a learner's individual consciousness "reflects the social and cultural relations which are different and antagonistic to those represented in school curricula." Therefore, a reason why critical reflection is significant to the learning process, is that it takes these assumptions as its impetus, to drive reflective thinking that is evaluative, probing, and discerning.

Reflection necessitates that individuals dwell in uncertainty, to spark thinking that extends beyond their preconceived understanding about the world (Dewey, 1997/1910). According to Gramsci (1999/1971, p. 179) "the *certain* becomes *true* in the child's consciousness." The paradoxical nature of this statement is telling, as it unearths a vital process involved in critically reflective thought. Knowledge that is 'certain' will always possess a dimension of uncertainty, as this knowledge is not 'known' but rather 'believed to be so'. When we cannot know that something is true for certain, we seek validation, to either confirm or deny the veracity of the knowledge that we possess. Traditionally, the role of the 'authenticator of knowledge' fell to the teacher, whose own understanding is placed above that of the student's (Giroux, 2011). In the 4Cs approach (Jefferson & Anderson, 2017), the learner is given the tools to explore

doubtful knowledge and impel their own self-directed inquiry in collaboration with their peers. However, it is this phase of uncertainty that renders the reflective process challenging and confronting for many learners. As Dewey (1997/1910, p.13) proposes, ‘dwelling in uncertainty’ presents a dilemma for learners, since it involves “a willingness to endure a condition of mental unrest” in their quest for understanding. If this experience is especially threatening or unusual, the learner may block the experience altogether to regain control of the situation (Mezirow, 1990). One reason why many students lack the resilience to move past this point may stem from their reluctance to dwell in this condition of uncertainty (Gramsci, 1999/1971). This supposition is especially relevant for educators teaching within a postnormal era, who may benefit from a pedagogy that fosters the competencies of resilience and grit to aid the critical reflection process. Educators must encourage students to probe what is uncertain, and to explore, contest, and validate taken-for-granted knowledge, so that they do not take everything they learn at face value (Mezirow, 1990). Both Dewey (1997/1910) and Gramsci (1999/1971) foreground the notion that uncertainty is vital to the reflective process, as it fosters the conditions necessary for critical reflection. Dwelling in uncertainty forces the learner to look beyond what they know and emerge from this reflective process with increased resilience and self-autonomy (Jefferson & Anderson, 2017).

Uncovering our assumptions also necessitates that we get our thoughts out and into the open to examine them more deeply. For our students, this process of ‘uncovering assumptions’ is made more fruitful when they begin to share their unique perspectives about subject content and see these perspectives collide, synergise, and resonate amongst their peers in new and exciting ways. Although there is no set way to begin this process, the principal aim is to provide a learning space where students are encouraged to communicate about their assumptions but are also guided to find their ‘voice’ to explore their thinking (Smith, 2011). According to Biesta

(2003), to find their 'voice' and allow their unique subjectivity to emerge through reflection, students must first be willing to respond to others. In his response to the writings of Emmanuel Levinas, Biesta (2003) considers how education provides students with an opportunity to respond, as he states that "pedagogy is not about handing down truths to the next generation, but about creating opportunities for children, students, newcomers to respond and, as a result, come 'into presence'" (p.64). According to Levinas (1987, p. 124), finding one's subjectivity and 'voice' is not something that occurs in solitude, but emerges through an ethical relationship where the individual is obliged to respond to another. The act of responding to another impels the learner to be vulnerable and open, to reveal their thoughts and feelings in a manner that can enable them to understand themselves more fully. As Biesta (2003, p. 63) states, "I come into the world, I come 'into presence' (Biesta, 1999b), therefore, when I respond." When a learner critically reflects with others, this social interaction obliges them to reveal their unique perspective and allow this perspective to be heard, questioned, and evaluated by others. Therefore, providing students with the opportunity to communicate and respond to others in the process of critical reflection supports them to understand themselves as unique individuals.

Communicating one's assumptions can be performed in many ways and does not necessarily begin with student talk, even though this arises organically in most classroom contexts. Secondary educators can make use of different strategies to encourage student reflection in a way that caters to the diverse and complex learning needs of their students, whilst seeking anonymous student feedback about the efficacy of these strategies in promoting individual and group reflection (Brookfield, 2017). The literature surrounding reflective and critically reflective teaching and learning in pre-service teacher education, social work, applied learning, and clinical and healthcare settings, reveals several transferable strategies that can be applied by secondary teachers to guide students as they work to communicate their reflection. These

strategies can include but are not limited to journaling and reflective diaries (Bassot, 2016, p. 38; Bornstein & Naveh, 2018; Carter & Kurtts, 2019; Furman et al., 2008), ePortfolios (Liu, 2020; Ryan, 2015), critical counter-narratives (Miller et al., 2020), metaphoric learning (Ivie, 1996; Johnson, 2001; Mezirow, 1990), poetry (Furman et al., 2008; McVerry, 2007; Speare & Henshall, 2014; Wright et al., 2010), letter-writing (Rios et al., 2003), videoconferencing (Clark et al., 2016), and student discussion boards (Ajayi, 2011). Significantly, these reflective strategies also double as formative assessment measures so that teachers can realistically judge the quality of reflection that occurs during learning and ensure that it is meaningfully connected to a learning intention and/or syllabus outcome.

2.4 Assessing Critical Reflection: Exploring the Process and Outcome

As CESE argues (2020, p. 25) in their publication *What works best*, “it is only via effective assessment that teachers can know if learning is taking place.” When planning for assessment from Kindergarten to Stage 6², teachers across NSW can utilise three approaches to document student learning: assessment *for*, *of* and *as* learning (NSW Education Standards Authority [NESA] (2024a). These approaches combine a mixture of formative, summative, and self-reflection or peer assessment to collect data that tracks the trajectory of student learning and guides differentiated and personalised forms of instruction. Yet, assessing critical reflection poses certain challenges here. The need to work towards measurable outcomes for quality teaching and learning experiences when practising critical reflection is problematised by Smith (2011):

a particular problem of critical reflection is that the range of available reflective techniques, domains and forms combined with a self-driven and self-specific form of assessment risks a relativistic position where what has been attempted or achieved is

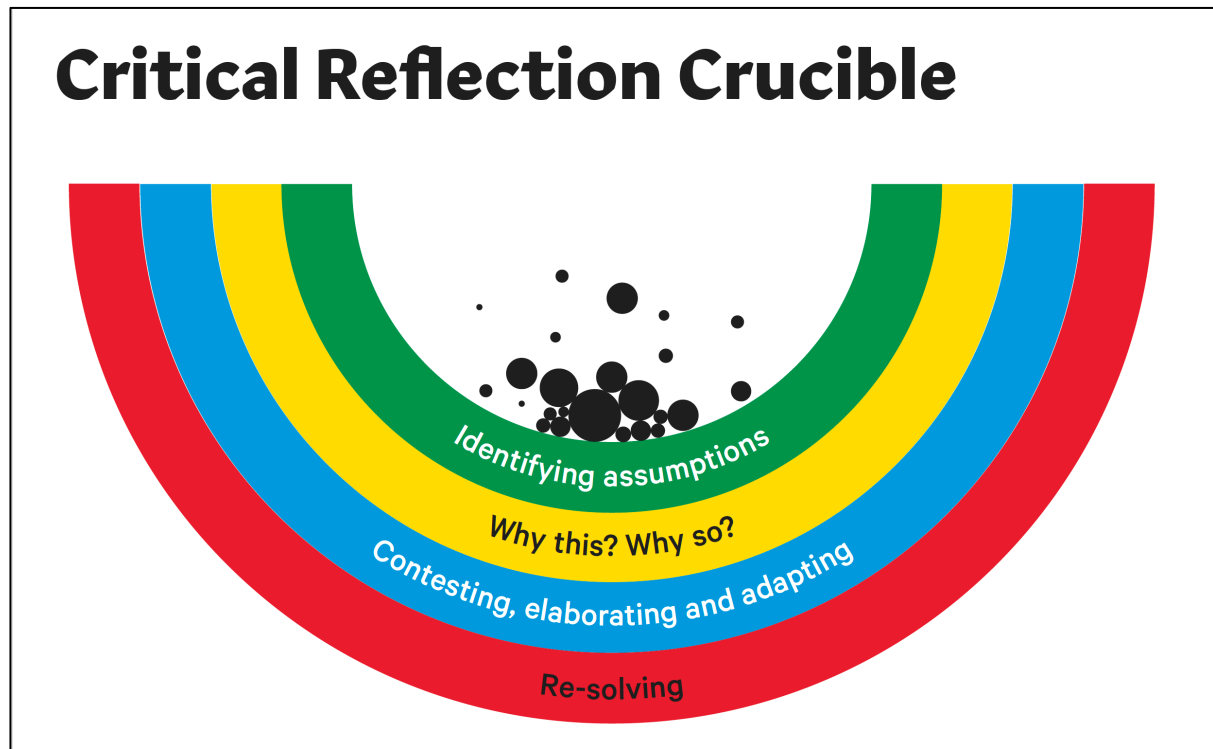
² In Australian secondary schools, ‘Stage 6’ refers to the final two years of schooling, namely, Year 11 and 12.

purely subjective (Morley 2004). If achievements towards being reflective are to be monitored and assessed there needs to be some basis for comparison or markers of quality (Ramsden 1992) (p. 218)

The ultimate goal of critical reflection when practised through a 4Cs approach is to re-solve our understanding of limiting or potentially harmful assumptions and turn this into actionable knowledge that can induce positive change. As students move through each stage of the Crucible (see Figure 2.1), there are assessable skills that teachers can support students to develop as they progress from identifying their assumptions to the final re-solving stage (Jefferson & Anderson, 2017, pp. 98-101). One of these skills is questioning. Learners must ask questions at each stage of the Crucible to aid their reflection and allow them to unearth and contest assumptions (Jefferson & Anderson, 2017). Posing ‘*why?*’ questions is essential to this process, just as is asking questions that “foster curiosity, open-mindedness, and possibility thinking” (Papaefstathiou & O’Grady, 2022, p. 107). When questioning is practised as part of critical reflection, it becomes another creative element of this process, since the questions being posed will differ in their form, content, and originality. As students begin to develop, pose, and test their own critical questions, they demonstrate critically reflective skills that allow them to process the knowledge that is brought to the table.

Figure 2.1

The critical reflection Crucible coherence maker poster



Note. Reprinted from Jefferson, M., & Anderson, M. (2021c). *Transforming education: Reimagining learning, pedagogy and curriculum* (p. 26). Bloomsbury Publishing Plc. Copyright 2021 Transformative Learning. Reprinted with permission.

The work of Rachael Jacobs (2012) presents an opportunity for teachers to assess the creative processes and outcomes of critical reflection through her research on the role of assessment and the assessor in aesthetic education. When assessing critical reflection, the process the learner undergoes is just as consequential as the outcome. In his book, *Art as Experience*, Dewey (1980/1934) writes that three qualities that embody an aesthetic experience include expression, emotion, and consummation. The process of critical reflection can amount to an aesthetic experience in the mind of the learner in two decisive ways. Firstly, through their social engagement with other learners as they encounter and interpret each other's perspectives and create new knowledge together. The second can be found in the form of expression students use to represent their reflection at each stage of the Crucible (Jefferson & Anderson, 2017).

Expressing reflection through writing, dialogue, illustration or even performance can adopt various aesthetic qualities that make it unique to that student and representative of their critically reflective learning journey (Papaefstathiou & O’Grady, 2022).

Jacobs (2012, p. 115) highlights the work of Gale (2005) to describe various outcomes of aesthetic learning, two of which also serve as examples of the types of knowledge and skills that Stage 4 learners will hopefully develop by participating in critical reflection, including the “development of personal and critical response through judgement and evaluative tools” and the “appreciation of different cultures, values and contexts.” Teachers will inevitably observe aesthetic elements throughout the critical reflection process and will be involved in this aesthetic experience as they help their students navigate the range of emotions that may surface as they share, challenge, and contest their assumptions. If we take poetry as an example, the process of selecting the right words to express oneself, coupled with the careful arrangement of those words on the page is a highly aesthetic experience that is synonymous with Jacobs (2012, p. 123) explanation of “aesthetic modes of thinking.” When examining an original poem, English teachers take into consideration that students are not simply regurgitating their knowledge of poetic form and expression onto the page but are also suffusing their work with their own personal interpretation and style that should be assessed accordingly. As Jacobs (2012, p. 123) concludes, “tailoring the assessment criteria in such a way that it can accommodate aesthetic modes of thinking” is crucial, as it allows teachers to consider the aesthetic elements that are involved in the process of critical reflection when planning for assessment in their respective Key Learning Areas [KLAs].

2.5 The Evolution of the 4Cs: What is the 4Cs Approach?

The concept of the ‘4Cs’ was born out of necessity in the early 2000s to respond to the pressing question of how educators could adequately prepare learners to work and live in an evolving and technologically savvy world. Historically, educators and academics alike have ardently pushed for a model of education that favoured the 3Rs (reading, writing and arithmetic) (Landon, 2019). The last 20 years has marked a noticeable shift away from the 3Rs and towards the 4Cs, with the adoption of hybrid models of education that merge the two (3Rs + 4Cs), or frameworks that place ‘critical thinking, creativity, collaboration and communication’ at the forefront of learning (Anderson, 2017; Battelle for Kids, 2019; Chiruguru, 2020; Keane, 2012; Landon, 2019; Remake Learning, 2016). However, although there is increasing interest in the transformational properties of the 4Cs on the outmoded educational systems of many countries, Landon (2019, p. 9) argues that “very little [research] assessed the importance and implementation of the 21st-century skills set.”

The “4C evolution” is “characterised by a climate of re-invigoration, excitement, challenge, difficulty, uncertainty and possibility” (Anderson, 2017). Yet, educating students who have competence in the 4Cs is a challenge that many teachers grapple with in Australian schools (Anderson, 2017; Keane, 2012). The 4Cs that are conceptualised in Jefferson and Anderson’s publications, *Transforming Schools* (Jefferson & Anderson, 2017), *Transforming Education* (Jefferson & Anderson, 2021a), and their most recent text, *How Schools Transform* (Anderson & Jefferson, 2024), envision the 4Cs through the lens of whole-school transformation. Yet, the notion of the ‘4Cs’ exists in various forms in educational scholarship. For example, the P21 Partnership for 21st-Century Learning, whose *Framework for 21st-Century Learning* (Battelle for Kids, 2019) first introduced the ‘4 Cs’ to the global teaching community in the early 2000s. With a commitment to “21st-century readiness for every student,” the P21 framework was

composed by educators, organisations, (including Apple, Microsoft, and Cisco) and education experts in the United States region of Pittsburgh to develop a workforce that is competent in 21st-century skills. The 4Cs relate to the “learning and innovation skills” subsect of this framework, with one evident change – ‘critical thinking’ replaces ‘critical reflection’ (Battelle for Kids, 2019). In their online guide, Tech4Learning (n.d., p. 4) detail the steps that educators can take to reinforce the 4Cs in their practice, claiming that “we need to create classroom cultures that value questions more than answers.” This sentiment is consistently echoed in *Transforming Schools* (Jefferson & Anderson, 2017), yet the notable shift to critical reflection as one of the Cs in Jefferson and Anderson’s 4Cs approach invites students to take their critical thinking a step further to challenge their assumptions, re-solve their understanding, and discover agency through deep learning.

2.6 Creativity, Poetry, and Critically Reflective Learning in a 4Cs Approach

The creative dimension inherent within critical reflection can be illuminated through an understanding of creativity as conveyed in a 4Cs approach (Jefferson & Anderson, 2017). The literature surrounding what it means to be creative is highly contentious and informed by a multitude of evidence-based and theoretical suppositions about how humans innovate and think in creative ways (Beghetto & Kaufman, 2007; Kaufman & Beghetto, 2009; Kaufman & Sternberg, 2019; Robinson, 2011; Sawyer, 2006, 2019). Kaufman and Beghetto (2009) look beyond the binary of “Big C” (novel ways of being creative) and “little c” (things that are personally creative) creativity to suggest two more dimensions: “mini-c” and “Pro-c.” The conception of mini-c creativity closely aligns with this capability as it is expressed in Jefferson & Anderson’s (2017) 4Cs. Mini-c creativity is defined by Beghetto and Kaufman (2007) as the “novel and personally meaningful interpretation of experiences, actions and events.” The originality and meaning that can be derived from this conception of creativity is personally

relevant, for example, through the realisation of a personal insight. Commonly, students who exercise mini-c creativity do not know that they are necessarily being ‘creative’ in the traditional sense and cannot see the transformative potential this holds for their learning. Thus, mini-c creativity shapes the product of critical reflection by adding personal value to the new understandings that students gain or the actions that they take as critically conscious learners.

In a 4Cs approach, critical reflection is imagined through the ‘critical reflection Crucible coherence maker’, a pedagogical tool that ‘makes coherence’ of this capability in practice (Jefferson & Anderson, 2017). The metaphor of the Crucible represents a four-stage process by which learners identify and question their assumptions, contest, elaborate and adapt their previous understandings and perspectives, and finally re-solve their understanding by bringing this new knowledge to fruition (Jefferson & Anderson, 2017, p. 98). This coherence maker is powerful as it conceptualises how the critical reflection process mirrors the use of a scientific crucible to test a substance (our assumptions) by applying heat (through questioning, contesting and perspective taking) to derive a product that is transformed both in form and meaning (‘re-solving’). The questioning stage of the Crucible (that asks *why this? why so?*) directly correlates with the inquiry stage of the ‘Creativity Cascade coherence maker’, where students are provoked to question their noticings by asking, ‘*really why?*’ Posing *why* questions pushes beyond a surface approach to learning and contextualises the problem or assumption that students are inquiring about more purposefully. For example, students may ask, ‘why is this perspective promoted over another?’ By imagining alternate perspectives and becoming curious about the representation of knowledge, it is evident how critical reflection embodies such creative processes. Since poetic form and language offers creative versatility in the way it can be used to replicate each stage of the Crucible, it can be employed flexibly as a vehicle

for reflection or as a representation of student learning during the final ‘re-solving’ stage (Jefferson & Anderson, 2017, p. 98).

An exploration of Glăveanu’s (2011) framework for collaborative creativity underscores the purpose of creative expression and creative outcomes when practising critical reflection. Since the 1980s, the literature surrounding creativity has shifted from the individualised notion of the “lone genius” to imagine the cultural and social dynamics of this capability more broadly (Glăveanu, 2011, p. 476). Collaborative creativity is defined here as “the generation of new and useful ideas or products by two or more persons who deliberately engage in a creative/idea generation task” (Glăveanu, 2011, p. 474). In this study, critical reflection is conceived as a ‘creative generation task’, as it aims to transform the way an individual thinks and acts by uncovering and challenging misinformed assumptions about their world. In his publication, Glăveanu (2011) analyses collaborative creativity through a sociocultural paradigm and embraces a Vygotskian approach to how knowledge can be constructed through co-creation, when interacting with others. Perspective taking is fundamental to this process (Mezirow, 1990), as learners must engage in the mutual sharing of perspectives, ideas, and opinions to reach a creative outcome together (Glăveanu, 2011).

To propose a framework for collaborative creativity, Glăveanu, (2011) adopts Winnicott’s (1971) notion of a ‘representational space’, where learners come together in a collaborative situation and participate in creative work. Students bring their own unique representational space to this process, which teachers will recognise through the QTM as their students’ ‘background and cultural knowledge’ (NSWDOE, 2024). When engaged in this common representational space (the Stage 4 classroom), learners draw upon ‘symbolic resources’ to guide the creative process, by sharing beliefs, ideas, arguments, techniques, or even objects

that carry personal import. As students begin to discover new ways of knowing and doing things, they co-create a new representational space where they can find creative solutions to the problems they are critically reflecting about. The novel outcomes of this learning are shown in the final re-solving stage of the Crucible (Jefferson & Anderson, 2017) and involve both personal transformations and larger transformations for the classroom and school community. Yet, Glăveanu (2011) argues that without trust and a willingness to engage in risk-taking during learning, this form of collaborative creativity cannot emerge. Notably, students who feel safe in the classroom are more likely to share their views and listen to their peers, since they exhibit trust in the learning environment that has been cultivated for them.

2.7 Developing a Learning Disposition for Critical Reflection: Fostering Critical Curiosity

To begin to imagine how our education system can transform to support the needs of 21st-century learners, an understanding of critical curiosity is needed to lay the foundation for critical reflection. Curiosity can be posed as a critically reflective competency, yet it is also deeply rooted in creativity and the ability to notice and learn about oneself within the world. Many scholars including Bassot (2016) and Fay (1987) have argued the dynamic connections that exist between critical reflection and competencies like curiosity, grit, and focus. Fay's (1987) research surrounding critical social theory proposed that critical reflection involved three idiosyncratic competencies, namely: curiosity, intelligence, and commitment. Although Fay's (1987) research is older, it remains useful in demonstrating how scholars observed an interrelated connection between critical reflection and curiosity. As a scholar of reflective practice, Bassot (2016) extends Fay's (1987) argument to assert the importance of curiosity within critically reflective practice. Curiosity stimulates our questioning disposition as human beings, thereby "keep[ing] us open to new possibilities" (Bassot, 2016, p. 132). For Bassot

(2016), fostering curiosity during reflective practice necessitates practitioners exercise an inquisitive mind, much like they did during their infancy. Being inquisitive leads the individual to question their surroundings, by posing ‘*what?*’, ‘*why?*’ and ‘*how?*’ questions to deepen their inquiry through their “urge to know more” (Engel, 2011, p. 627). For example, when a child sees their parent eating something that looks tasty, they might feel the urge to ask, ‘what’s that?’ or ‘can I have some?’ Exhibiting “spontaneous curiosity” by posing such questions enables the child to explore new domains in their human experience (Clark & Seider, 2017, p. 126). However, it is the development of critical curiosity through critical reflection that guides learners to foster an interest in and understanding of the issues of inequality and social justice that pervade our society (Freire, 2005b/1970; Freire & Shore, 1987). Displaying grit becomes an intrinsically motivating factor throughout this process, so that even when students encounter challenges during critical reflection, they can exercise resilience and display initiative to persevere. As Clark and Seider (2017 p. 136) contend, there is “relatively little extant research [that] has specifically investigated critical curiosity in adolescents.” Although this is not the focal point of my research, this study keenly observes how curiosity can be fostered in adolescents to support the development of critically reflective learning.

In 2017, Clark and Seider designed a mixed methods, longitudinal study that conducted interviews across five, American high schools to investigate how critical curiosity was fostered through students’ engagement with the curriculum. Several strategies including enticing curiosity through exposure to ‘new’ or ‘surprising’ information that incites an emotional response are valuable, as they align with a multi-perspectivist approach to critical reflection. Learning does not occur in a vacuum and teachers must recognise that there are knowledge traditions that influence the way curriculum content has been represented for students (Apple, 2004). Knowledge that is understood in a multi-dimensional manner through multiple and

diverse perspectives, narratives, and voices, sparks critical reflection and promotes deep learning. Although Clark and Seider's (2017) study is pertinent, it does not offer a cohesive pedagogical framework that supports learners to build dispositions like critical curiosity in schools. By applying the 4Cs (Jefferson & Anderson, 2017), students can build critical curiosity through their understanding of the Learning Disposition Wheel [LDW] and the 4C capabilities, namely: critical reflection, creativity, collaboration, and communication. The LDW fosters nine interconnected competencies that forge the learning disposition required to practise each capability, including critical reflection. The LDW draws on the principles of Self Determination Theory [SDT] proposed by Ryan and Deci (2000), to imagine these nine competencies through three dimensions: the interpersonal (expressing, interpreting, and responding to social messages), the intrapersonal (managing one's emotions and behaviours) and the cognitive (thinking and reasoning) (Jefferson & Anderson, 2017, p. 42). The LDW realises the importance for agentic, self-regulated, and deep learning that guides students to forge connections between their actions, skills and understandings in different learning contexts.

The intrapersonal domain of the LDW adopts *curiosity*, *focus* and *grit* as essential competencies that drive reflexivity and social and emotional understanding and wellbeing, which all lie at the crux of critical reflection (Jefferson & Anderson, 2017). The capacity for students to be "interested and resourceful" through their curiosity and exercise their imagination is what stimulates the process of possibility thinking (Greene, 1995). This form of thinking requires students to determine how poorly functioning aspects of their society can be modified to enhance the social and emotional prosperity of the broader community, yet they must effectively envisage how this change will look and feel. When education is regarded through the lens of postnormality (Sardar, 2010), the capacity to exercise our 'social

imagination' to envision a more socially just world provides learners with a hopeful tool to navigate the complexity, chaos and contradiction that typifies our world (Sardar, 2010). Our ability to devise new ways of thinking, planning, and practicing across all sectors of society will be invaluable as we visualise and rebuild a post-COVID-19 world.

SDT-based interventions can be used when teaching critical reflection to boost student motivation when engaging in challenging learning (Stone et al., 2009). Praise or positive reinforcement is a well-known and widely practised intervention by teachers during learning. Praising students whilst they complete a challenging learning task can have both motivating and demotivating effects depending on how it is delivered. If praise is delivered in a controlling manner or used at every opportunity, the student will develop a false impression of what they are capable of, leading them to become dejected when they cannot accomplish a difficult task independently (Stone et al., 2009). Yet, when working within a student's Zone of Proximal Development [ZPD] (Vygotsky, 1978), praise becomes a motivating factor that empowers the learner to build autonomy and mastery of a particular skill or content point when their teacher recognises their accomplishments and progress (Walker, 2010).

Whilst praise offers teachers an opportunity to build extrinsic motivation during critically reflective learning, this should be met with interventions that also promote situational interest in the content. Situational interest "generates curiosity, which can lead individuals to explore an activity further and develop individual interest in it" (Wigfield et al., 2019, p. 4). Situational interest is initiated by using stimuli during teaching to produce "focused attention" and an "affective reaction" from students (Hidi & Renninger, 2006, p. 113). If teachers program their units with the intention to provide more inlets to critically reflective learning that pique student interest, a shared curiosity and commitment to questioning and pondering about the content

will be generated. Hidi and Renninger's (2006, p. 114) four-phase model of interest development offers evidence-based strategies to elicit situational interest, including the use of "incongruous [or] surprising information" and "learning environments that include group work." Yet, to maintain students' situational interest in the content, teachers should implement teaching and learning strategies that embed personal relevance and student involvement to sustain students' engagement and increase the likelihood that individual interest will emerge (Hidi & Renninger, 2006). For students to engage in critical reflection, high levels of support are required to master the reflective and critical thinking skills needed to challenge their assumptions and ponder ideas deeply and critically. This support can take the form of praise or can occur through "the affordances of the tasks or domain in which a [student] works" (Hidi & Renninger, 2006, p. 123).

Releasing the transformative potential of our imagination crucially leads to conscientisation, as individuals are compelled to critically consider a future that is free from oppression, marginalisation, and injustice (Freire, 2005a/1974). To think *why* and *how* is to uncover this landscape of possibility for societal change and renewal through critical reflection; and the setting that currently situates and drives such transformation is the classroom. Notably, a critical review (Taylor, 2007) of empirical research surrounding transformative learning situates critical reflection in several studies that explore the impacts of Mezirow's (1997) Transformative Learning Theory [TLT]. Since the popularisation of this theory, critical reflection has played a prominent role in the realm of adult learning across many interdisciplinary contexts. Mezirow (1997) argues that adult learners are predisposed to practicing critical reflection, by reassessing the assumptions (or meaning perspectives) formed during childhood. Yet, this does not mean that adolescents cannot authentically engage in critical reflection to the same extent. Adolescents have much to learn and experience

throughout their secondary education, which will propel the critical reflection process. This research will take the pivotal first step to demonstrate how adolescents practice critical reflection during learning and the transformative potential offered by this process.

2.8 Critical Reflection, Critical Thinking: Considerations and Hidden Phenomena

Practising critical reflection is not a new concept in academic research, as disciplines including psychology, preservice teacher education, and social work all foreground the importance of this capability (Fook & Gardener, 2007; Fook et al., 2016). Yet many educational researchers have preferred to study critical thinking, prompting Australian educational bodies like the Australian Curriculum, Assessment and Reporting Authority [ACARA] (2019) and NESA (2019) to develop their frameworks and curricula with such capabilities in mind. If secondary teachers venture online, they will quickly discover many frameworks for integrating critical thinking as a ‘general capability’ into their practice, as evidenced by ACARA’s (n.d.) *Critical and Creative Thinking learning continuum*. Yet, there is scant research that provides the same support for primary and secondary teachers who are interested in teaching critical reflection. The focus on critical thinking and its applicability during learning has been long-withstanding, due to its analytical and problem-solving potential (Mayer, 1992; Weldon, 2019). Since individuals like Eric Mayer (1992) envisioned the future of schooling to ultimately prepare our young people for a changing workplace, such capabilities are favoured because they improve worker efficiency and offer individuals the cognitive skills to effectively navigate challenges.

However, what becomes concerning is the way that critical reflection and critical thinking are being used interchangeably in educational research and practice. A potential reason why this pattern is emerging in educational settings can be attributed to our perception of critical reflection as a ‘hidden’ phenomenon. Adopting a Heideggerian perspective is useful here, as a

reason why selected phenomena have remained hidden, is because when they are discovered, there is the potential that “our understanding of these phenomena may degenerate if communicated in the form of an assertion” (Heidegger, 1962, p. 61). As definitions of these phenomena are passed down to new generations, their meanings are rooted in empty assertions, thereby causing them to lose their “indigenous character” (Heidegger, 1962, p. 61). Critical thinking is a foundational process involved in critical reflection, as it supports the initial reflective phase where our assumptions are identified and unpacked (Jefferson & Anderson, 2017, p. 98). Thus, it is not presumptuous to suggest that the reason why these terms are used interchangeably is because the intrinsic and legible similarity that they share has caused some practitioners to merge their understandings of these two phenomena over time. Therefore, at its phenomenological core, critical reflection must be understood in the contexts through which it emerged. We cannot authentically conceive the political and agentic nature of critical reflection as an emancipatory capability if we do not trace its origins back to the educational reformation experienced in places like Brazil (1930) and Italy (1923) (Freire, 2005b/1970; Gramsci, 1999/1971). To do this, teachers must return to the classroom, as it is this teaching and learning space which stimulates dialogue and questioning about our assumptions that inevitably sparks critical reflection (Heidegger, 1962). Therefore, although critical thinking is a precursory skill required for critical reflection, these capabilities must be acknowledged as related yet distinct phenomena that influence each other yet are not identical.

2.9 Agency and Power: Acting *for* the Social Good

Critical thought was born as a reactionary response against oppression. For critical pedagogues like Freire (2005a/1974; 2005b/1970), action and thought are bound in a dialectic, whereby only through purposeful dialogue could individuals begin to ponder their circumstances more critically (Freire & Shor, 1987). Freire (2005b/1970) observed that his community, being both

poor and illiterate, were not able to perceive how the hegemonic systems of power that were governing this community were in fact perpetuating their oppression. By gaining a critical consciousness of their circumstances, both Freire (2005b/1970) and his community were empowered to act in ways that liberated them from misinformed assumptions about their personal worth and social capability as working-class citizens. This case study helps us to portray critical reflection as an action-oriented capability, since it produces “actionable-knowledge” (Goodyear & Markauskatie, 2017, p. 118) that leads oppressed individuals to emancipation and renewed understanding. According to Habermas (1972/1968), action and knowing are interconnected and generative processes since the act of reflection provides a vehicle for the creation of new knowledge and by extension, new actions. This idea is extended by Liu (2020), who recognises the generative power of this capability and draws upon the work of Brookfield (2017) to develop a six-step hermeneutic approach for critical reflection that is geared towards transformative learning. To date, this model (Liu & Ball, 2019; Liu, 2020) has been designed for and adopted by teacher educators and currently practising teachers globally but is not intended as a critically reflective pedagogy that can be used to inform and teach adolescent secondary students how to critically reflect as part of their learning. Significantly, critical reflection must be tied to action so that it leads to transformation, or more specifically, the transformation of the object of reflection (whatever this may be). Otherwise, as both Brookfield (2017) and Mezirow (1990) suggest, reflection for the sake of reflection is a deficient and nihilistic undertaking, as it cannot yield transformative learning “as the basis for change in the classroom” (Liu & Ball, 2019, p. 90).

Critical reflection explicitly questions *why* we act in the ways that we do and the implications these actions have for ourselves and the people around us (Hoyrup, 2004). This can be understood in practice as a form of metalanguage for how learners can ponder the connection

between their thoughts and the implications of their past, present, and future actions. As proposed by Emirbayer and Mische (1998, p. 975), “past experiences condition present actions.” This process of “schematisation” necessitates individuals reflexively look back to prior schemas of experience to inform the actions they take in the present and future (Emirbayer & Mische, 1998, p. 975). If we consider why Freire’s (2005b/1970) community were ignorant of their oppression, these individuals neither had the linguistic capability nor the critical awareness to see things relationally, that is, to discern how their existence within this society was given meaning through the relationship they shared with those in power (Apple, 2004). To act with agency for ourselves and on behalf of others, we must recognise the ways that people “relationally engage with pre-existing schemas” (Emirbayer & Mische, 1998, p. 975). If we take the COVID-19 pandemic as a contemporary example, our actions had never been more vital in ensuring the safety of the broader community. Assumptions regarding the wearing of face masks and COVID-19 vaccinations during this time sparked continuing controversy, not only in Australia but also abroad. The classroom did not escape this contentious debate, as students were taught about the implications that stem from their action or inaction during this time. Nevertheless, educators who foster agency must acknowledge its inherent neutrality, as students can either use it to act *for* or *against* the social good (Emirbayer & Mische, 1998). Therefore, agency must be framed through the lens of a critically reflective pedagogy, so that learners understand the temporal, relational, and ethical dimensions of their actions both in and beyond the classroom space.

2.10 Social Learning and Relational Agency

Relational agency is another avenue through which teachers can build students’ capacity to engage in critical reflection. The research conducted by Edwards and D’arcy (2004) suggests that teachers harness students’ dispositions for learning to shape their actions in more inclusive

and empathetic ways, thereby leading to joint action and understanding. Yet, the authors (Edwards & D'arcy, 2004, pp. 149-150) highlight that relational agency is not merely “collaborative action on an object”, but “the ability to seek out and use others as resources for action and equally to be able to respond to the need for support from others.” As students engage in critically reflective tasks and carry out decision-making and problem-solving processes, they can work relationally with their peers to support each other and shape each other’s actions. This form of social learning is largely connected to the student’s ZPD (Vygotsky, 1978) and their capacity to engage autonomously in a challenging learning task with or without external support. The perspective taking and knowledge-generation practices inherent in relational agency support a critically reflective learning environment, one akin to the learning environment produced through a 4Cs approach. As Edwards and D’arcy (2004, p. 150) argue, “by engaging with the dispositions of others within a ZPD, learners gain new insights into the phenomena they are tackling.” Students therefore feel more supported in this learning environment to take risks and make decisions publicly because they can draw upon the shared knowledge and interpretations of their peers to inform their own reasoning, especially if the content is new, surprising, or challenging. The affective dimension of relational agency also highlights the capacity for students to learn about each other and evolve together as individuals through a shared cultural and personal understanding.

2.11 Emotional Learning: Fostering Empathy and Emotional Literacy

There exists a palpable emotionality to practising critical reflection, since an important aim is to guide learners to regulate their emotions, build relationships, and consider how their emotions compel their actions (Jefferson & Anderson, 2017; Dirkx, 2006). Dirkx (2006, p. 23), illuminates how “emotion-laden images” can be used to prompt critical reflection by tapping into the emotionality of the content being taught. When practising critical reflection in any

curriculum area, the learner will inevitably traverse emotionally sensitive terrain, where reflection may surface feelings of guilt, shame, fear, anger, or anxiety within the individual. It is the teacher's role to be cognizant of this reality and willing to support students to recognise such emotions as they engage in this reflective process and manage the classroom space to ensure emotional safety. Interestingly, Boler (1999) proposes that an understanding of emotional intelligence is shaped by the relationship it shares with empathy and power. Exercising empathy is a key component of critical reflection because it helps the learner to engage in perspective taking that guides them to "understand and act for others" (Jefferson & Anderson, 2017, p. 42) and appreciate diverse experiences (O'Grady, 2020). This involves the explicit teaching of "emotional literacy", as the ability to "recognise emotions in others" and view the world through another's perspective, which then enables learners to shape their social interactions through this newly formed empathetic awareness (Boler, 1999, p. 65). These definitions of empathy are problematised and highlighted by O'Grady (2020), who explores the dynamic potential that a pedagogy of empathy can hold for preservice teachers. Here, empathy is defined as a "multidimensional construct" that goes beyond simply placing oneself in another's shoes (O'Grady, 2020, p. 4). However, O'Grady argues that empathy must be "activated in productive and transformational ways" for it to flourish (O'Grady, 2020, p. 3). When empathy is practised in tandem with critical reflection, it demonstrates that the learner has not only strived to understand and relate to the experiences of another but can now deduce how these experiences have shaped the unexpected or conflicting perspective they have encountered. This understanding becomes productive and/or transformational when it leads to a change in sentiment or behaviour that seeks to benefit humanity. If we picture a preservice educator who is teaching a student from a refugee background for the first time, critically reflecting on their practice requires empathetic awareness that applies their understanding of

the student's prior experiences to shape the teaching and learning that is delivered in a supportive and culturally responsive manner (Hammond & Miller, 2015).

Yet, emotions are also underpinned by relations of power: For example, in many Romantic era English texts, it is not morally appropriate for a man to cry in the presence of a woman, as this subverts the masculine ideology that men are stoic and contingent beings. For an English teacher attempting to convey the socio-cultural ideologies implicit in the writing of Jane Austen or the Brontë sisters, examining how emotions drive an individual's actions or influence the cultural currency of a past society is an empowering tool for student learning. Conversely, through critical reflection, students must be taught how to temper their emotions if they flare to the point where they shape their behaviour or actions in harmful ways (De Neve et al., 2022). Since emotional learning contributes to student wellbeing, all future educational research must investigate the emotional dimension of critically reflective learning and how this is experienced by students in classrooms (De Neve et al., 2022).

2.12 Teaching Critical Reflection to Adolescents: The Challenges faced by Secondary Teachers

The concluding chapter in Liu's (2020, p. 129) book offers a point of contention for educators when considering what it takes to forge a "transformative teacher education community." Liu's (2020) timely research is committed to offering preservice educators a framework for how to practise critical reflection to improve their pedagogy when entering the profession. There are many lessons to be learnt from the experiences of American preservice teachers here, as they shed light on the tools required by Stage 4 teachers of critical reflection in Australian classrooms. My teaching experiences as a secondary teacher of English as an Additional Language or Dialect [EAL/D] and a pre-service teacher educator in an Australian university

setting has confirmed that this process is both daunting, exciting, and increasingly challenging for many preservice teachers. A predominant reason for this, is that apart from Jefferson and Anderson's research (2017, 2021a) on the 4Cs, there is limited research that situates critical reflection within a primary or secondary educational context that makes it the focal point of student learning rather than a reflective tool to enhance preservice teacher education. Since the publication of Brookfield's (2017) seminal text, *Becoming a critically reflective teacher*, the resulting wave of multidisciplinary research that aimed to prepare educators across the globe to take on the challenge of critical reflection has blossomed and forged an extensive evidence-base for practitioners (Carter & Kurtts, 2019; Dinkelman, 2000; Felton & Koestler, 2015; Fook, 2007; Gorski & Dalton, 2020; Jacobs et al., 2011; Komins & Nicholls, 2003; Larrivee, 2000; Little, 2015; Liu, 2015; Lo, 2010; Ossa Parra et al., 2015; Yost et al., 2000). Although this research is plentiful and valuable to shaping the way primary and secondary teachers approach critical reflection as practitioners, it does not adequately provide them with a framework to teach and practise critical reflection with their students, for whom this capability proves to be equally valuable to their future learning.

When teachers struggle to grasp the essence of critical reflection and what it means to them as a beginning educator, this influences their ability to teach it to their students. For many NSW high schools that have adopted Jefferson and Anderson's (2017, 2021a) 4Cs approach, it seems that grasping the theoretical underpinnings of critical reflection and realising the transformative nature of this capability takes time and cannot be rushed if we expect educators to teach it independently and achieve fruitful learning outcomes (Jefferson & Anderson, 2017; Papaefstathiou & O'Grady, 2022). This resurfaces the issue of efficacy and assessment, as teachers who are new to critically reflective pedagogy will struggle to determine if the learning that has occurred in their classroom is indeed critical reflection or some other form of reflective

learning (Smith, 2011, p. 218). As such, this study will attempt to draw a roadmap for secondary teachers, to help them navigate the twists and turns of teaching critical reflection by forging an evidence-base to support their teaching practice.

Just as our students must understand the learning dispositions necessary for practising critical reflection when applying the 4Cs (Jefferson & Anderson, 2017, 2021a), so too do secondary educators need to cultivate ‘attitudes for reflection’ that support them to teach this capability effectively. Dewey (1933) encourages his readers to position their reflection through different attitudes, which provide a cognitive and affective framework that enable individuals to arrive at reflective action. This premise directly correlates with the outcome of critical reflection as Brookfield (2017, p. 217) argues, reflection must be the means for an end, and that end is emancipatory action “that is linked to how the world can be changed.” The first of these attitudes is whole-heartedness, which translates to a genuine interest in and desire to teach one’s subject area. In Rodger’s (2002) appraisal of ‘whole-heartedness’, she acknowledges that whilst Dewey (1933) exclusively referred to this attitude as embodying the content we teach, it can also be expanded to include the learning that occurs and the impact of our teaching on student learning more broadly. Although it is obvious to teachers *why* cultivating a passion towards our KLAs is necessary, fostering whole-heartedness towards our practice also compels us to find hidden connections between the big picture ideas, perspectives, and beliefs that students will encounter as they dig deeper into the content.

Adopting ‘directness’ as our second attitude is difficult, as Rodgers (2002) establishes that Dewey’s (1933) definition is somewhat hazy and offers a multitude of possible ways that we can interpret ‘directness’ when teaching. Rodgers (2002, p. 860) suggests that directness “indicates a confidence...an attitude of trust in the validity of one’s experience without

spending a lot of time worrying about the judgement of others.” For a seasoned teacher who is honing their practice, this confidence comes organically and enables the teacher to focus on their students’ learning needs, rather than worrying about their delivery of the content. Yet, a beginning teacher who is new to the profession may find that their confidence does not bloom as naturally, since they are still mastering their practice and understanding themselves as teachers in this new environment. To teach critical reflection in a way that focuses on the transformative outcome of learning, it’s vital that teachers “know the content and how to teach it” (Australian Institute for Teaching and School Leadership [AITSL], 2017, 2.1), to free their mind to consider how students grasp and respond to this content in critically reflective ways. Whilst being perhaps the most valuable attitude, Dewey’s (1933) concept of open-mindedness is simultaneously considered to be the most challenging for teachers to develop when it comes to their reflective practice (Liu, 2015). Cultivating open-mindedness in the classroom can allow teachers to reap the richest rewards when facilitating critical reflection, as Liu (2015, p. 5) recognises:

when teachers are able to be open to different points or even the ones that are greatly opposing to their own belief systems, they are more likely to reflect in a manner to seek different alternatives to the problems that need to be solved.

This implies that both teachers and students permit themselves the willingness and patience to entertain diverse perspectives, even if those perspectives conflict with the beliefs that define them as individuals (Rodgers, 2002). Dewey (1933) cautions educators that practising open-mindedness does not mean that they uncritically accept every idea that comes their way, but instead exercise caution to make an informed critique about the perspectives being shared. However, as Brookfield (2017) contends, this is no easy endeavour. Notably, Brookfield (2017) refers to open-mindedness as a discipline rather than an attitude, which projects it as something

that requires dedication, time, and patience to master. Furthermore, this attitude must be gradually developed and introduced to students, so that they become accustomed to expressing their opinions and feelings about different perspectives with their peers during learning. When considering how overburdened secondary teachers are as they navigate the pitfalls of a cramped curriculum, planning and programming, and mounting administrative duties (Gavin et al., 2021; NSW Teachers Federation, 2022; Stacey et al., 2023), additional time is needed for targeted professional learning that supports them to build these reflective attitudes and apply them in practice (Baxter et al., 2021; Keane, 2012).

Since this study aims to explore how critical reflection can be taught creatively through a multi-perspectivist lens, I will now foreground the intrinsic connection shared by Dewey's (1933) attitude of open-mindedness and Jefferson and Anderson's (2021a) LDW. Within the cognitive dimension of the LDW, teachers and students are encouraged to "build new ideas" as a pathway to new knowledge (Jefferson & Anderson, 2021a, pp. 91-93). When attempting to define open-mindedness through Dewey's (1933) writings, Rodgers (2002, p. 863) highlights that "Dewey reminds us that to be open-minded means not only being hospitable but also being playful." This element of playfulness resonates with Greene's (1995) work on the imagination and possibility thinking, since the individual is invited to open their mind to consider, *what if?* This element of play also insinuates the use of touch and exploration during learning, akin to the "playing with possibility" step described by Jefferson and Anderson (2021a) in the Creativity Cascade coherence maker. According to Jefferson and Anderson's (2017, 2021a) research, the inclination to be playful and discover new ideas, experiences, or perspectives hinges on the capacity to blend, bend, and break ideas to forge new ones (Jefferson & Anderson, 2021a). Yet, despite our best efforts to be open-minded, the level of risk taking involved in this learning inevitably means that teachers will encounter problematic knowledge on their road to critical

reflection. A possible way to prepare teachers for the uncertainty they will face in the classroom is by practising reflection-in-action, or as Schön (1992, p. 68) outlines:

the practitioner allows [themselves] to experience surprise, puzzlement or confusion in a situation which [they] find uncertain or unique. [They] reflect on the phenomena before [them], and on the prior understandings which have been implicit in [their] behaviour. [Thus, they] carry out an experiment which serves to generate both a new understanding of the phenomena and a change in the situation.

As students become more confident in expressing their assumptions and playing with the possibilities that these new perspectives afford them, they will encounter divergent opinions that may cause a breakdown in communication. In this circumstance, the teacher must be able to think on their feet and respond to the situation appropriately, whilst also considering what learnings can be gained for both themselves and their students. As such, the teacher transforms from facilitator to researcher, as they construct their own understandings about critical reflection through this process of trial and error (Schön, 1992).

2.13 Chapter Conclusion

Chapter Two has explored seminal literature regarding the theoretical frameworks that underpin critical reflection and its pedagogical application as a transformative and agentic capability. The next chapter will discuss the methodological underpinnings of this study.

Chapter Three: Methodology

3.1 Chapter Introduction

This chapter presents the qualitatively driven multimethod design employed to answer the main research question and the corresponding sub questions in this study. To begin, the research methodology will be explained in light of the research questions and data collection methods employed at each phase of the study. A case for the use of both hermeneutic phenomenology and poetic inquiry as the main qualitative methodologies will be made and the decision to implement a multicase study will be detailed. This will be followed by an overview of the school site, its student demographics, and overall experience with implementing a 4Cs approach (Jefferson & Anderson, 2017, 2021a) to date. The selection of teacher and student participants will then be outlined, as well as the role of the researcher as a participant observer in this study. Finally, this chapter will explore the methods of data collection used in this study and the data analysis approaches adopted. The limitations that align with the discussion of the above methodologies will be interweaved throughout this chapter where relevant instead of featuring as a stand-alone section.

3.2 Research Design

This multicase study is informed by a qualitatively driven multimethod design that seeks to gain insight into the complex layers of experience that define critical reflection as a phenomenon that occurs during learning. A methodological design such as this adopts a form of intra-paradigm research, since it blends two qualitative methodologies to respond to the research questions being answered, thereby resulting in a richer and more targeted examination of critical reflection in this study. This argument is supported by Hesse-Biber et al. (2016, p. 9) who also note that a qualitatively driven multimethod design is suitable “when exploring areas that have not received much attention or have not received any attention thus far.” This

observation highlights the chief driving force of this study, as it will serve as one of the first Australian research studies to examine the use of critical reflection as a creative and transformative pedagogy in NSW secondary schools that adopt Jefferson and Anderson's (2017, 2021a) 4Cs approach.

When deciding which qualitative methodologies would best compliment my research questions, I inevitably weighed into the ongoing methodological debate concerning multimethod and mixed methods research. Anguera et al. (2018) argue that there are several possible methodological combinations when designing a multimethod study. Although both Morse (2010) and Hesse-Biber et al. (2016) offer a definition of multimethod research where one qualitative method is given predominance over the other (also known as a QUAL-qual design), this study will assign equal weighting to the qualitative methodologies used by adopting a QUAL-QUAL pairing. In doing so, this study has applied hermeneutic phenomenology (an interpretative branch of phenomenology) and poetic inquiry to explore how critical reflection can be imagined creatively in the Stage 4 classroom, whilst also considering how it can be fostered through a multi-perspectivist lens. As an arts-based approach, poetic inquiry enables the study to simultaneously appraise how critical reflection can be fostered using poetry as a creative tool. I believe that poetic inquiry pairs effectively with a hermeneutic phenomenological approach, as it enables both the researcher and the reader to “tap into universality” and capture the multidimensionality of the phenomenon through the participants' shared experiences (Faulkner, 2016). This enables the participant-poet to forge knowledge by embracing a “form of open-ended and fluid reflection” that is critical and multi-perspectivist (Speare & Henshall, 2014, p. 809). Furthermore, the writing of poetry in this study encourages metaphoric reflection, which prompts the critical analysis of systems of power and

inequity across society using figurative language (Coryell & Wright, 2010; Lakoff & Johnson, 1980).

3.2.1 Adopting a Hermeneutic Phenomenological Approach (QUAL 1)

Hermeneutic phenomenology enables the investigation of this phenomenon to be rooted in interpretation, so that the research elicits a hermeneutic understanding of critical reflection through the participants' experiences during teaching and learning (Neubauer et al., 2019). By adopting a hermeneutic philosophy, I acknowledge that my pedagogical experiences as a researcher and secondary teacher are valuable to the study and will critically inform the data collection and analysis process (Smith et al., 2009). However, because the vehicle for understanding this phenomenon is through the subjective experience of each participant, the relationship between expression and experience must be problematised (Turner & Bruner, 1986). Mackey (2005) suggests that researchers who adopt a hermeneutic method must acknowledge the descriptions offered by participants as their authentic expression of the phenomenon. Since it is my participant's 'reality' that I am exclusively documenting, I must accept that my research can only be "experience-close" (Smith et al., 2009, p. 33), as my re-articulation of the participant's lived experience will be shaped by my interpretive work during data analysis. Thus, entering this "double-hermeneutic" is an inevitable limitation that every phenomenological researcher must face (Smith et al., 2009, p. 33).

Notably, this interpretive work involves deciphering the apparent and latent meanings that are communicated through a participant's account of the phenomenon (George, 2020, p. 5). This connects to the notion of a "hermeneutics of suspicion", coined by Paul Ricoeur, who explores the interplay between language and meaning when communicating one's subjective reality (George, 2020, p. 5). As a hermeneutic researcher, the attributive component of my work lies

in the reflexive consideration of the participant's subjective account of their lived experience, which is where the "double-hermeneutic" lies (Ivey, 2023, p. 22). However, the phenomenological researcher's pursuit of subjectivity is fraught with challenges; one being that even in their attempts to communicate their accounts as faithfully as possible, our participants can unknowingly distort, misinterpret, or insufficiently interpret their experiences. As Ivey (2023, p. 22) argues, this can result in "partial, occluded, or attenuated accounts of self and others." These hidden meanings are not necessarily displays of deception by the participant but can be imagined as a "psychologically significant experience that is unconscious insofar as it is not immediately available for introspection and verbal expression (Ivey, 2023, p. 24)." As this research includes participant interviews as key data collection methods, a key consideration is to focus on both the interview encounter and the interview transcript during data analysis, to enable a richer and more reflexive conception of the account being communicated (Ivey, 2023, p. 28). Therefore, placing emphasis on both the encounter as well as the interview transcript, accounts for the multiplicity of human communication that is captured in the interaction taking place, which supports the unearthing of such hidden meanings (Ivey, 2023, p. 28).

When mental phenomena are studied through a hermeneutic lens, each phenomenon does not have one 'essential meaning', but rather, multiple meanings that comprise its core. This is visualised in Vagle's (2014 p. 5) phenomenological research through the concept of the "hermeneutic spiral". The spiral (modelled off Heidegger's understanding of hermeneutic phenomenology) (Vagle, 2014) functions on the premise that a phenomenon exerts multiple meanings that are fluid and constantly revolving around its core, to represent the way that participants attribute meaning to phenomena through their subjective experiences. Depicting critical reflection through this hermeneutic spiral accounts for its inherent complexity, as a

mental phenomenon and pedagogic capability that manifests and is interpreted differently by students and teachers during practice. What is important to remember here is that no two experiences of critical reflection will ever be the same, as the phenomenon is interpreted and experienced differently by individuals, even when practising critical reflection in a collaborative classroom setting, as explored by this study. Critical reflection is therefore context dependent, as it relies on the individual interpreting their assumptions as the impetus for reflection. This is further complicated by the process of social reflection, where learners share and contest each other's perspectives to fuel the critical reflection process. Thus, a hermeneutic approach will capture the complexity of this phenomenon in practice and allow its processes to be authentically understood and visualised for readers.

It is worth noting that critical reflection exhibits intentionality as a mental phenomenon. Since intentionality relates to the way an individual conceives a phenomenon as a conscious object in their mind, my own 'phenomenological consciousness' of critical reflection has directly informed the main research question posed by this study (Vagle, 2014). This notably surfaces a key limitation. Phenomenologists affirm that researcher subjectivity will ultimately implicate the research process, particularly when adopting a hermeneutic approach that foregrounds the expertise and interpretation offered by the researcher (Finlay, 2012; Henriksson & Friesen, 2012). The decision to practise phenomenological reduction or 'bracketing' is a method used exclusively in a transcendental or Husserlian approach, which demands that the researcher separate themselves from the study, so that their preconceptions of the phenomenon do not skew the reporting of the results (Laverly, 2003, p. 23). As a hermeneutic researcher, I must consider my understandings about this phenomenon, so that I can demonstrate a critical awareness of how these suppositions will shape the data analysis process. To do this whilst simultaneously upholding the authenticity of a hermeneutic approach, I adopted the

phenomenological act of bridling throughout this study (Dahlberg, 2022; Vagle, 2014). I practised bridling by questioning the assumptions and preexisting knowledge I brought to the study, so this information was acknowledged and then put aside. This allowed me to focus on what I *saw* rather than what I already *knew*. Bridling enabled me to be reflexively aware of how my suppositions and experiences of critical reflection influenced the research yet also obligated me to ‘bridle’ my interpretation, so that I did not come to hasty conclusions based on these suppositions (Dahlberg et al., 2008). Furthermore, this allowed me to notice the phenomenon in new ways (Dahlberg, 2022, p. 1023) as I began to hear and see how my participants perceived it during interviews and classroom observations of their teaching. In this manner, my aim was to allow the phenomenon to manifest itself to both myself and my participants, and ensure that their accounts and experiences were foregrounded (Finlay, 2012; Laverty, 2003).

When practising IPA, an analytical approach that aligns with hermeneutic phenomenology, the participant is placed at the forefront of the meaning making process so that their experience is understood and made significant (Larkin & Thompson, 2011, p. 102). As Larkin and Thompson (2011, p. 103) assert, IPA researchers access human experience through “a process of intersubjective meaning-making”, which involves a level of reflection on their own experiences and assumptions. Since I cannot escape interpretation as an IPA researcher, I practised bridling to confront my assumptions and prior knowledge about the phenomenon beforehand (Larkin & Thompson, 2011, p. 104). One way this was achieved was by producing written reflections using a field diary before conducting each phase of the study. Unlike conventional phenomenological research studies, IPA research embraces the researcher’s active role in this hermeneutic process and acknowledges how their subjectivities inevitably shape the study, rather than attempting to ‘bracket’ them (Larkin & Thompson, 2011, p. 102).

As an IPA study, I will now consider some additional epistemological assumptions regarding hermeneutic phenomenology. Hermeneutic phenomenology seeks to understand experience by moving from ‘the particular’ to ‘the whole’, thereby using the hermeneutic circle to deliver an ideographic approach to data interpretation and its subsequent analysis (Laverly, 2003, p. 24). By moving back and forth between the parts of an individual’s experience, the researcher can produce a detailed, cohesive, and realistic image of what a phenomenon looks and feels like through these personal accounts. An evident limitation here is the risk of becoming lost in the intricacy of these details, thereby moving away from the phenomenological ‘essence’ being captured in the participant’s account. To navigate this challenge, particularly when interpreting my own written observations during a lesson, conversations with participants took place to debrief what I saw and clarify the details of our collective experience in these moments.

3.2.2 Adopting Poetic Inquiry as an Additional Methodology (QUAL 2)

Poetic inquiry was chosen as the additional qualitative methodology in this multimethod study due to its ability to enhance the way the phenomenon of critical reflection is understood and manifested in the Stage 4 classroom. Poetry, as a language of empowerment, possibility, storytelling, and perspective, is intrinsically phenomenological because of its intention and desire to capture the complexity of the human experience (Furman et al., 2007; Leggo, 2018, p. 362). This phenomenological connection aligns poetic inquiry with phenomenology as complimentary qualitative methodologies. Additionally, the interpretive dimension of poetry further compliments a hermeneutic approach to phenomenology (Heidegger, 2001/1971).

As Monica Prendergast (2009, p. 545) states, the power of poetic inquiry lies in its ability “to do as poetry does” by synthesising “experience in a direct and affective way.” This is supported by Leggo (2016) and Furman et al. (2007, p. 302), who perceive poetry as a vehicle for

expressing powerful and multiple ‘truths’ about the human experience, or in this case, how individuals experience critical reflection. In this way, poetry is presented as an expressive arts methodology, as it enables researchers to “magnify the intensity of the affective experiences of people” (Furman et al., 2007, p. 303). Since critically reflective learning involves emotional learning to build empathy, regulate emotional responses, and express thoughts and feelings during reflection, poetry as a source of data representation becomes a dynamic way to capture this for readers of this study. Like Cahnmann (2003), I perceive the value of using poetry in educational research through this methodological pairing, as the decision to unite poetry with hermeneutic phenomenology allowed me to construct a qualitative research study that embraced the creative, critically reflective, and transformative nature of the subject of its inquiry.

In her exploration of poetic inquiry across the literature, Prendergast (2009, p. 545) categorises how poetry can be created and featured in a research study. I aligned my use of poetic inquiry with Prendergast’s second category, namely, participant-voiced poetry, which includes poems that are written using interview transcripts or created solely by participants themselves (Prendergast, 2009, p. 545). The poetry that features at the beginning of Chapters Four to Six are found poems, as they have been created using participant interview transcripts from the qualitative data (Butler-Kisber, 2002; Lahman et al., 2010; Prendergast, 2009). However, the found poem featured in Chapter Five deviates slightly from this practice, as this found poem interlaces a combination of transcript quotes and fieldnotes related to a learning experience that was observed by the researcher during a lesson. By doing so, I acknowledge that my use of found poetry is experimental yet also embracing of the poetic process that blends multiple participant voices to create a found poem (Prendergast, 2009, p. 545). As Glesne (1997, p. 93) argues, experimental writing such as this “makes writers and readers more aware of the

researcher's relationship with the text and research participants" whilst also introducing "spirit, imagination, and hope" into each piece.

When using poetry as a means for data representation, I consider the words of Prendergast (2009) as she problematises the use of language to poetically narrate experience:

Language is always inadequate. We dance with impossibility each time we put words on the page. It is far better to dance with impossibility than to accept the first ordinary word that comes to mind, the easy cliché. Honouring the circumstances and the individuals by careful, hard-won description is, fundamentally, an ethical choice we make each time we approach the page. (p. 551)

As a phenomenological researcher, these words are striking as they align with a similar notion argued by Smith et al. (2009, p. 33) in their conception of IPA research as only ever being "experience-close." The duality of Prendergast's (2009, p. 551) words therefore highlights a limitation for this research. The construction of found poetry "is an act of creative editing that carries ethical considerations," as the researcher must strike a balance when playing with another's words (Robinson, 2022, p. 78). The ethicality of creating poetry from participant transcripts necessitated that I demonstrated a level of self-reflexivity when I undertook this process. This simultaneously aligned with my role as an IPA researcher when practising bridling, as this process demanded the same reflexivity concerning how I implemented my methodologies to conduct this research transparently so that others may replicate it in future studies. As Furman et al. (2007, p. 303) ironically suggested, I had to be willing to critically reflect as I composed the found poetry that is featured in this study to honour the participants' words, whilst simultaneously highlighting the evocative and universal experience that is critically reflective learning.

Just as Glesne (1997) elucidates her process of poetic transcription to create found poetry for the reader, I will similarly explain my own methodological and creative processes to evidence how I have adopted poetic inquiry to represent the data. The processes that I undertook when constructing found poetry in this study are detailed in the points below:

- All interview transcripts were transcribed accurately. A software program called Descript (2024) was employed to do this, and the transcript was cross-checked against the audio recordings to ensure that no details were omitted or incorrectly recorded.
- The transcripts were read and re-read multiple times before analysis began. This then produced the master tables for each phase of the study, which is where quotes were derived to create the found poetry.
- Transcript quotes were highlighted from the master tables to create found poetry based on the following criteria: The quote was selected because of its salience on the page and its connection to an emergent theme; the quote used strong emotive language; the quote aligned with the tone and subject matter of the poem; the quote was evocative; the quote highlighted a key reaction or attitude towards a learning experience; the quote provided an explanation or definition of a key term/idea.
- Punctuation was added to the poetry to enhance its form whilst also blending and connecting multiple voices together. Punctuation also played an interpretive role in allowing the researcher to emphasise certain words or ideas.
- Formatting choices were made to provide the found poems with a distinctive style, as they were based on a free verse form of poetry. These editing choices included the use of lines, spacing, italics and boldface, which also helped to create a distinction between the contributions of the researcher-poet and the words of the participants.
- The use of titles for each found poem represented another creative opportunity for the researcher to shape the poems through their observations as a participant-observer in

this study. This is evident in the found poem in Chapter Six, titled, *Critical reflections, Connections, and the Ticking Clock*. The capitalisation of these key words gives them presence and symbolic value in this found poem, offering figurative hints to the reader as to key findings that the researcher wishes to highlight.

Poetry was also employed as a source of qualitative data in this study through the poetry that students produced during learning. These poems featured as artifacts that were collated throughout the field work component of this study (Phase Two) and featured in Chapter Six, where they contributed to a discussion and analysis of the findings. As Furman et al. (2007, p. 303) reveal, supplementing the data set with poetry in this way can lead to a “highly consumable and emotionally evocative” representation of the qualitative data. The benefit of seeing the product of critical reflection through this poetry makes the critically reflective process visible for the reader and helps to demystify this phenomenon for teachers of this capability. These poems work together to offer a poetic montage of critically reflective learning that allows the reader to simultaneously partake in the interpretive process when viewing and reading them.

3.2.3 Qualitative Multimethod Design: Hermeneutic Phenomenology and Poetic Inquiry

This qualitative study adopts a multimethod design which embraces an intra-paradigm approach to how the two qualitative methodologies will be combined to answer the research question. A multimethod design was chosen as it unites two epistemologically synonymous qualitative methodologies, hermeneutic phenomenology and poetic inquiry, to allow for a deeper exploration of critical reflection as it is experienced by Stage 4 teachers and students in 4Cs classrooms (Brewer & Hunter, 2006). Historically, there has been a blurring of what constitutes ‘multimethod’ research, with many scholars using the terms ‘multimethod’ and

‘mixed methods’ synonymously and when combining two disparate methodologies, i.e., quantitative and qualitative (Anguera et al., 2018, p. 120). In this study, both qualitative methodologies are given equal weighting in a QUAL-QUAL pairing to explore the phenomenon of critical reflection through the main research question.

This QUAL-QUAL pairing embraces a pluralistic approach to qualitative research design that recognises the phenomenon under exploration as complex and multidimensional in nature (Flick, 2022, p. 576). The benefit of conducting a pluralistic research study is twofold. Firstly, adopting methodological pluralism through the combination of two qualitative methodologies allows the phenomenon of critical reflection to be explored through a variety of lenses, which are both researcher-focused and participant-focused. As a phenomenological researcher, this compels researcher reflexivity when considering and selecting the types of methodologies that would most suitably pair to conduct this study effectively (Flick, 2022, p. 583). Additionally, embracing pluralist methods to collect data including semi-structured interviews, *in-situ* interviews, lesson observation, field notes, and artifacts (student work samples), provides a depth and breadth of qualitative data that can better respond to the complexities of the phenomenon under investigation (Flick, 2022, pp. 582-583). However, Flick (2022, p. 582) cautions novice researchers against adopting pluralistic research approaches if the intention is purely for novelty, which neglects careful consideration of how the methodologies converge to respond to the research question or phenomenon being studied. A pluralistic approach also lends itself to the data collection methods, which embrace data crystallisation, a qualitative approach that will be explained later in the subsequent section on ‘data collection’.

3.2.4 Adopting a Multicase Approach

The collection of cases that comprise this multicase study are the two Year 8 English and Geography classes at Moonstone HS. A multicase design was practical for this research, as it offered a lens into what critically reflective practice looked like in an educational setting. These cases are bound by their interest in critical reflection, as each teacher has co-designed a short unit of work (approximately four to six weeks long) with the researcher that aimed to foster critical reflection through a multi-perspectivist lens, using poetry. Each phase of this study aimed to provide an in-depth exploration of the teachers and students in these two Year 8 classes and their journey to learning about and fostering critical reflection through creative means (poetry) in their lessons.

Where these cases differed included: the subject area or KLA being taught, the student demographic of each class, the number of teachers per class, each teacher's knowledge and experience with teaching critical reflection, the teacher's confidence in using the critical reflection Crucible as part of a 4Cs approach, and the extent to which the teacher used poetry as a creative tool to foster critical reflection. These factors influenced the qualitative data that was garnered from this research, and the insights that will be gained from this study. Stake (2006, p. 6) proposes that when one is engaged in multicase research, the predominant aim is to understand the *thing* that categorically binds these cases, or as he terms it, the "*quintain*". In this research, the *quintain* is the study of critical reflection using poetry, through the lens of Jefferson and Anderson's (2017, 2021a) 4Cs framework. By recognising what binds my study, I can now consider the main issues that a multicase design will illuminate through this research. The sub-questions that frame my study serve as "issue questions," since they predict what the audience will inevitably gain by reading this study (Stake, 2006, p. 10). This is evidenced by sub-question c: *How can poetry be used as a creative tool to facilitate critical reflection during*

teaching and learning? By posing this question, I have highlighted the possibility of using poetry as a creative tool, as a central issue to be investigated across both cases in this multicase study. However, as Stake (2006) cautions, even though these questions organise the research study, they will not necessarily frame the final report, since the qualitative data may surface new insights about the *quintain* that the researcher has not yet perceived. The decision to use data crystallisation to represent the qualitative data both poetically (using found poetry and student poetry) and in a written discussion and analysis enabled such insights to surface and their nuances to be elucidated in Chapters Four to Six of this thesis.

3.3 Site Selection

This study took place at Moonstone High School [HS], a co-educational public high school located north of Wollongong, NSW. Moonstone HS adopted the 4Cs transformative learning approach (Jefferson & Anderson, 2017, 2021a) as a framework for whole-school transformation and had been implementing 4Cs practice for a handful of years at the time of this study. 4Cs practice underpins teaching and learning within this school both at the classroom and whole school level and has been spreading through ongoing teaching, leadership, and professional learning since its adoption phase. Purposive sampling was employed to recruit participants that are closely connected to this phenomenon (teachers and students in a high school that adopts the 4Cs), as this sampling method aligns with an IPA approach to data collection and analysis (Smith, 2008). The decision to confine the setting to a high school that adopts the 4Cs approach (Jefferson & Anderson, 2017, 2021a) has enabled a more focused exploration of the phenomenon of critical reflection in this study, as it is articulated and practiced through this educational framework. Similarly, due to the limitations imposed on this study by the impacts of the COVID-19 pandemic and a prolonged period of remote learning in NSW schools, the study was unable to recruit additional high schools for participation.

3.4 Participant Selection

Jeremy, Marcus, Dominique, and Violet are the four teacher participants recruited into this study from Moonstone HS. As previewed in Chapter One, these teachers had varying levels of teaching experience with the 4Cs, as well as a varied understanding and implementation of critical reflection in their lessons. Marcus, Jeremy, and Dominique all formed part of a teaching team on the Year 8 English class, which consisted of 27 students. This English class was an enrichment class, which meant that students were chosen based on their ability and invited to challenge and extend their critical literacy skills through their study of English. Violet was the sole teacher of the Year 8 Geography class, which was comprised of 22 mixed ability students.

Participants were selected based on their current role and experience as teachers in a 4Cs high school, who were set to teach a Stage 4 class in 2022, when the study took place. Ideally, teacher participants needed to have some background knowledge surrounding the *Crucible* as a teaching tool to foster critical reflection using a 4Cs approach, but this criterion was imposed flexibly due to the limitations enforced by the recruitment phase of this research. Teacher participants and their classes were recruited into this study based on the following criteria³:

- Is a high school teacher who works at a secondary school that adopts the 4Cs approach (Jefferson & Anderson, 2017, 2021a)
- Is teaching at least one Stage 4 (Years 7 or 8) class in 2022 (this is when fieldwork at Moonstone HS took place)

³ Please note that not all teacher participants conformed to the criterion points listed due to difficulty recruiting schools at the time. School recruitment took place during October of 2021, when schools were transitioning out of a prolonged period of remote learning due to government mandated lockdowns during the height of the COVID-19 pandemic in NSW, Australia.

- Has undertaken professional development in 4Cs practice (Jefferson & Anderson, 2017) at their school
- Has used the critical reflection Crucible as a teaching tool to inform the planning and delivery of at least one unit of work or has experience using the Crucible to design teaching and learning strategies across one or more units (not every teacher was able to meet this criterion)
- Is willing to experiment with a critically reflective pedagogy and make it the focus of their planning/delivery of one unit of work for their chosen Stage 4 class
- Is passionate about poetry and/or interested in using creative processes like poetry to teach critical reflection
- Is willing to experiment with poetry as a creative tool to develop critical reflection during teaching and learning that occurs in this unit of work
- Is willing to participate as a ‘co-researcher’ to plan and deliver a unit of work in consultation with the researcher, which implements and demonstrates critically reflective teaching and learning

When the recruitment phase of this study began, public-school teachers in NSW were ending a period of government mandated lockdown due to the COVID-19 pandemic and were only beginning to return to their classrooms. This shift back to face-to-face teaching coupled with increasing teacher workloads and administrative duties made it challenging to recruit teachers who possessed these criteria into the study. According to the AITSL (2023) *Australia Teacher Workforce Survey* conducted in 2022, five percent of teachers reported an intention to leave the teaching profession in the next year, while most had experienced burnout. As such, the challenges facing potential teacher participants being recruited into this study were high. Whilst this made the recruitment process slower and more difficult, it did not make it impossible to find teachers who were inspired and energised by the possibilities offered by this

study in such challenging times. By offering teachers the opportunity to co-design the units of work to be taught and observed during this study, they had both the support of the group (the teacher participants involved) and the researcher as they entered the study. Teacher participants expressed a genuine interest in speaking about critical reflection and reflecting upon how they were currently implementing this capability in their classrooms. Participants also expressed excitement at the prospect of knowing this capability better to supplement the professional learning being undertaken in Moonstone HS and enrich the teaching and learning experiences delivered to their students.

3.5 Ethical Approval

Ethics approval for this study was sought through The University of Sydney Human Research Ethics Committee [HREC] and approved on the 27th of July 2021. Ethics approval to conduct research in an NSW public school was sought from the NSW State Education Research Applications Process [SERAP] and was granted on the 21st of October 2021. Copies of the approval documents can be found in Appendix A. In accordance with this ethics approval, the names of all research participants and the school have been de-identified and allocated representative pseudonyms to protect their anonymity. As the student participants were under the age of 16 at the time of this research, both student and parent/carer written consent were sought and obtained through consent forms (see Appendix B) before the commencement of the study.

3.6 Data Collection

3.6.1 Employing Data Crystallisation

Data crystallisation was employed to increase the validity of the data set and allow participants' experiences of critical reflection to be captured in a multitude of ways that similarly align with

the phenomenon under exploration (Shagoury, 2011). This approach embraces poetry as an artistic mode of data representation, to authentically explore how poetry can be applied as a creative means to evoke critically reflective learning (Ellingson, 2009, p. 6; Shagoury, 2011). Data crystallisation provided a way for this study to embrace the artistic and creative way that critical reflection is understood and taught using 4Cs practice by challenging the boundaries of traditional research reporting through the inclusion of found poetry and student poetry. As such, this study practised data crystallisation in the following ways (Ellingson, 2009, p. 6):

- This study utilised more than one genre of writing to explore the phenomenon under investigation and report the research findings. This thesis blended traditional report writing (using prose) with found poetry crafted by the researcher, and student poetry that form part of the qualitative data set.
- The study showcased a substantial level of reflexivity when considering the methodologies used, the types of data collection methods, and data analysis methods. I exercised reflexivity by considering my role in the study and the way I shaped the data collection and analysis process as a participant-observer during lesson observations and researcher-poet through my creation of found poetry in Chapters Four to Six.
- This study perceives knowledge as situated, embodied, and embedded in power relationships that both seek to empower and oppress (Ellingson, 2009, p. 10; Freire, 2005b/1970). These hegemonic systems of power exist in our schools and necessitate that we position our learners to uncover and awaken to their influence on the construction and dissemination of knowledge in classrooms (Apple, 2004, p. 3).

Data crystallisation allowed for multiple methods of data collection to imbue the findings with a greater level of depth and breadth to explore the complexities of the phenomenon of critical reflection (Ellingson, 2009, p. 11). As Ellingson argues, “with crystallization, very deep, thick

descriptions (Geertz, 1973) are possible. Multiple ways of understanding and representing participants' experiences not only provided more description, but more points of connection through their angles of vision on a given topic." This richness equally compliments an IPA approach, as it supports an ideographic analysis of the research findings (Smith et al., 2009). As Ellingson (2009, p. 16) problematises, achieving such richness necessitates considerable time and effort from the researcher to construct a coherent final work. Whilst this was not a major limitation, it did compel me to prioritise and carefully consider how each part of this thesis would come together to achieve this synergy, as I engaged in data analysis and the writing and composition of the final thesis.

3.6.2 The Semi-structured Interviews

Semi-structured interviews were conducted with the teacher participants at the commencement (Phase One) and conclusion (Phase Three) of this study to ascertain how their understanding and experience with teaching critical reflection has changed over the course of the study. These interviews were conducted on a one-on-one basis with each teacher participant remotely over Zoom, as this provided a more convenient meeting option that catered to both the participants and the researcher. Originally, teacher participants were afforded the option of meeting in person, on site, yet this became untenable due to the physical location of the school and the travel requirements. Offering a Zoom interview option was beneficial for this study as it did not limit the scope of teacher participants who were recruited into the research to only those based in physically convenient locations (Lo et al., 2016).

A semi-structured interview schedule was devised using open-ended questions targeted to the main research question and three sub-questions (see Appendix C). This functioned as a guide for the interviews and helped re-direct the conversation when it strayed too far away from the

topic being discussed. As a method of interviewing most commonly used in educational research, semi-structured interviews provided enough scope for the researcher and participant to have purposeful conversations that were linked to the research question, whilst also enabling new insights, anecdotes, and questions to be explored (Creswell, 2012, p. 218; Ruslin et al., 2022, p. 25).

The semi-structured interviews ranged from 30 to 40 minutes in length and were governed by a flexible schedule of interview questions that enabled the researcher to develop a rapport with each participant and explore ‘curious’ insights that surfaced during an interview (Smith & Osborn, 2003). These questions included optional ‘follow-up’ questions intended to enrich or deepen the conversation where appropriate. All interviews were recorded via the Zoom meeting recording option and transcribed using a video transcription software program called Descript (2024). Written consent was obtained from teacher participants via participant information and consent forms (see Appendix B) prior to conducting the first phase of interviews, whilst consent was confirmed verbally before each interview began.

During Phase Two of the study, the decision was made to supplement the data with impromptu, *in-situ* student interviews to capture how students experienced critical reflection during memorable learning moments. These interviews occurred between the researcher and students in the classrooms that were being observed as part of this study. As a participant-observer during these lessons, I deemed which learning moments were worth probing further through impromptu interviews with students. This decision inevitably shaped the findings garnered from this phase of the study, as the learning moments that stood out were those where students found joy, creativity, deep engagement and/or were challenged by the learning taking place.

Acknowledging my influence over this aspect of data collection allowed me to demonstrate reflexivity as a phenomenological researcher adopting an IPA approach (Smith et al. 2009).

Only two student interviews occurred during the lesson observations undertaken in the fieldwork phase (Phase Two) of this study. These interviews did not follow an interview schedule, as the questions being asked arose organically in the moment. Interviews were brief, ranging from 10 to 15 minutes long, and were audio recorded using a mobile recording device. Written consent was obtained from students and their parents/carers before the interviews took place, and students were asked again verbally if they consented to be interviewed before an interview began. A student list was created for each class in consultation with the classroom teacher identifying the name and photo of each student, to clarify who did/did not consent to being interviewed, so that the researcher was abreast of this information before approaching a student during a lesson. This also minimised any potential disruption to the lesson when interviews took place. All impromptu student interviews were transcribed using Descript (2024).

3.6.3 Lesson Observations

Lesson observations took place during the fieldwork component (Phase Two) of this study to reveal how students and teachers experienced critical reflection firsthand, in the 4Cs classroom. The lesson observations were crucial to answering the research question and sub-questions, as they enabled the phenomenological ‘essence’ of critical reflection to be captured authentically, *in-situ*. Participant observation is a profound way of capturing human experience as it permits the qualitative researcher to come closer to the phenomenon being observed, to understand the microcosm of learning that takes place in unique educational settings including 4Cs schools (Cotton et al., 2010, p. 464). Furthermore, observation offers a multiplicity of viewpoints and

experiences from which to study critical reflection, which crucially foregrounds the diversity of the student voice (Schostak, 2010, p. 447). I adopted a participant-observer role during lesson observations, to be able to interact and engage with student participants during learning, as well as conduct interviews to enrich and supplement the observational data that was collected (Cotton et al., 2010, p. 464; Creswell, 2012, p. 230). My role as a participant-observer enabled me to also experience many of the 4Cs processes alongside students, which supported a more realistic reporting of how such processes transpired and contributed to critically reflective teaching and learning across the Year 8 classes. Employing unstructured, *in-situ* student interviews enabled the open-ended interview questions to arise from a moment of interest, which lead the research into new and curious territory. However, by doing so, I concede that my own preconceptions about what learning moments were deemed ‘valuable’ enough to probe through an interview with student/s were inherently subjective.

An observation protocol was designed beforehand, to document fieldnotes during lesson observations (Creswell, 2012, p. 228) (see Appendix C). This included space to document the chronology of events taking place in the lesson, as well as pertinent quotes from teachers and students. The observation protocol was designed so that each stage of the Crucible was tabulated, to note/describe the teaching and learning strategies that potentially fell into each category. Although this was somewhat challenging due to the pacing of some lessons, it was beneficial in structuring the observation protocol to allow for more explicit observations to be recorded. As Cotton et al. (2010, p. 466) argue, this also minimises the tendency for the researcher to record everything that is seen, but instead produce a more targeted set of fieldnotes that can effectively respond to the research questions (see Appendix C). A field diary was also used to take fieldnotes during lesson observations where convenient. The use of a

field diary afforded me the opportunity to list any curious, interesting, or memorable moments that transpired, which could not be appropriately listed in the observation protocol.

A subsequent limitation that arose during lesson observations was the nature of the fieldnotes being recorded. As a phenomenological researcher, I was considerate of reporting what I saw as objectively as possible, whilst clearly noting when my own subjectivities and interpretations of the lesson were shaping my observations. For example, during lesson observations, I focused on describing what I saw as plainly as possible and avoided making interpretations of what I saw. I was compelled to practise bridling here, so that I could openly acknowledge how my observations were being shaped by my knowledge and interpretations during a lesson (Vagle, 2009, p. 591). As Vagle asserts, it is vital for the phenomenological researcher who is practising bridling to strike a balance between being open to and paying attention to the phenomenon, whilst also imbuing or ‘giving’ it meaning themselves (Vagle, 2009, pp. 591-592).

Written consent was sought and obtained from both students and their parents/carers before lesson observations commenced. Students who did not consent to being observed and did not want to be present in the classroom during selected lesson observation days were allocated classwork and joined another class running on the same period or were supervised in a separate location in the school.

3.6.4 Artifacts (Student Work Samples)

The inclusion of artifacts offered an innovative way to supplement the data set and visually depict the results of critically reflective learning across both Year 8 classes. The student work samples collected were comprised predominantly of student poetry, as well as other artifacts that demonstrate critically reflective learning throughout lessons in Year 8 English and

Geography. Written consent was sought and obtained from both students and their parents/carers to collate, copy, and showcase their work. The copies of the student work featured in this thesis have been de-identified to secure the confidentiality of their creators. In cooperation with the teacher participants, student work was collected and documented during the fieldwork component of this study, both on site and remotely via email correspondence with each teacher. These work samples are discussed in Phase Two of the study and various examples can be found in Chapter Five of this thesis.

When approaching data representation, as previously stated, artifacts like student-voiced poetry offer a way for this study to practise data crystallisation to enrich and diversify the qualitative data set that represents the way critical reflection is experienced and understood in the Stage 4 classroom (Ellingson, 2009). As Saldaña and Omasta (2018, p. 116) explain, an artifact can be interpreted as anything produced by an individual, which is used in their daily lives or routines. The artifacts produced by the students in the Year 8 classes represent their learning in Geography and English as they are supported by their teachers to engage in critical reflection for various purposes. These artifacts are significant because they offer visual, written, artistic, and poetic representations of critical reflection as it is experienced by students during learning, something which has seldom been documented in educational research.

Supplementing the data set through poetry offers a holistic approach to the research process and represents the qualitative data in a more transformative and artistic manner (Leavy, 2017). Using poetry as a form of qualitative data has received considerable criticism, with many researchers asserting that it has neither the objective nor empirical grounding to be considered a valid exemplar of data (Shapiro, 2004). Yet, scholars like Faulkner (2016), Leavy (2014, 2017), Glesne (1997), and Prendergast (2009) highlight its worth as an artistic expression of

experience, relations of power, and subjective thought. Since poetry is a conduit for human experience, it powerfully enables both teachers and students to dwell in uncertainty and possibility as they explore curriculum content together (Heidegger, 2001/1971). Leavy (2014) proposes that novice researchers who are using poetic inquiry for the first time should consider what poetry will evoke in their audiences. I hope that readers of this study approach these poems with open-mindedness and curiosity, so that the poetry can reveal the wondrous creative potential inherent in critically reflective learning.

3.7 Data Analysis

IPA is a research approach both epistemologically and ontologically connected to phenomenology, in particular, the branch of hermeneutic phenomenology that stems from the philosophical teachings of Martin Heidegger and Hans-Georg Gadamer. Although more commonly employed in psychology, IPA has gained traction as a popular and suitable approach to data collection and analysis in social studies and educational research (Smith et al., 2009, p. 1). IPA is concerned with investigating and elucidating lived experience, to generate a deeper awareness about phenomena that are experienced by humans, particularly those that are metaphysical, subconsciously experienced or exhibit intentionality, otherwise known as ‘mental phenomena’ (Pernu, 2017, p. 2). Critical reflection can be classed as a mental phenomenon as it possesses intentionality, a concept that reveals the way that our mind creates a mental object of this phenomenon, which we then use as a touchstone for reflection and comprehension (Moran, 2000). For Nagel (1974), the intentionality of a mental phenomenon is the subjective quality that the individual attributes to it as it enters their consciousness. Thus, the way that students and educators experience critical reflection during teaching and learning will be subjectively different because of the intentional relationship that the subject (the conscious individual) shares with the object (the mental phenomenon).

As Smith et al. (2009, p. 3) argue, IPA is “committed to the detailed examination of the particular case. It wants to know in detail what the experience for *this* person is like, what sense *this* particular person is making of what is happening to them.” In this regard, an IPA approach offers an in-depth exploration of the subjective experience of how critical reflection is defined, understood, taught, and reflected upon by each teacher participant. As previously argued, the role of the researcher in an IPA approach must be defined and problematised here. Smith et al. (2009, p. 3) illuminate the dichotomy posed by the “double hermeneutic”, or the interpretive loop that entangles the researcher when conducting IPA research. This is explained by Smith et al. (2009) below:

It can be said that the IPA researcher is engaged in a double hermeneutic because the researcher is trying to make sense of the participant trying to make sense of what is happening to them. This captures the dual role of the researcher. He/she is employing the same mental and personal skills and capacities as the participant, with whom he/she shares a fundamental property - that of being a human being. At the same time, the researcher employs those skills more self-consciously and systematically. As such, the researcher’s sense making is second order; he/she only has access to the participant’s experience through the participant’s own account of it. (p. 3)

IPA openly acknowledges that knowledge and experience is co-constructed in this way, as it moves through levels of interpretation between the research participant and the researcher.

3.7.1 The Hermeneutic Circle- Moving from ‘Parts’ to ‘A whole’

The hermeneutic circle supports IPA researchers to conceptualise the iterative method of IPA data analysis that is governed by a dynamic relationship between the parts and the whole when making sense of an individual’s experience (Smith et al. 2009, p. 28). This synergetic

relationship provides an entry point into the data, allowing the researcher to approach the data from different levels of interpretation. How Smith et al. (2009, p. 28) conceptualise this process is through the example of decoding a word embedded in a sentence of an interview transcript. The meaning of a word only becomes clear when the word is read in context.

Whilst approaching IPA research in this linear and step-by-step manner is important, the main factor that differentiates IPA from other analytical methods is that it is iterative. Therefore, when examining a text, the researcher can enter the meaning making process at several interpretive levels and through different perspectives (Smith et al., 2009, p. 28). IPA researchers can also apply this approach flexibly and creatively to various forms of data that extend beyond conventional data collection methods like semi-structured interviews. As Smith et al. (2009, p. 40) assert, “as researchers, we must be creative in our application of these methods,” whilst “the route through them will not be a linear one” (p. 80). Additionally, where IPA differs from other analytical methods like discourse analysis, is its focus on cognition, or what the participant thinks or believes about the phenomenon under investigation (Smith et al., 1999). My application of the IPA steps when analysing student interviews, lesson observation protocol quotes and descriptions, and fieldnotes, adapts these steps to embrace a less prescriptive method of IPA that aligns with my use of data crystallisation in this study. The process of data analysis using the IPA steps for each type of qualitative data sourced in this study will be detailed below.

3.7.2 Analysing Interview Transcripts

All interview transcripts were produced digitally using a software program called Descript (2024), which converted the audio or video recorded interviews into a written transcript for the researcher. This method of data transcription was chosen due to the number of interviews

conducted across all three phases of the study, and to reduce the excessive workload created by hand-written data transcription. Despite boasting an automatic transcription accuracy rate of up to 95 percent (Descript, 2024), Descript is limited in its transcription accuracy. Since errors in transcription did inevitably occur, these were mitigated by cross-examining each automated transcript against the original recording to correct these errors.

Each transcript was then copied and de-identified before analysis began. The original interview transcripts were transferred into an analysis template constructed by the researcher that aligned with the IPA steps (see Appendix D). This template included a table with three columns. The middle column was where the original transcript was placed, whilst the lefthand and righthand columns offered space for subsequent notes and analysis. The lefthand column, titled ‘Initial/Exploratory Comments’, offered a space for the researcher to detail their initial noticings about the transcript, which were further categorised into ‘descriptive’, ‘linguistic’ and ‘conceptual’ comments (see Appendix D). The righthand column provided space for the emergent themes to be listed, both as singular words and/or phrases.

I have adopted the approach to the IPA steps outlined by Pietkiewicz and Smith (2014) as a framework when appraising my verbatim interview transcripts. These steps are based on analysis undertaken on a case-by-case basis, as detailed below:

1. Read and re-read the interview transcript multiple times (it may also help to listen to the audio-recordings to re-immense oneself in the data).
2. As you read, make brief annotations in the left-hand margin of the document (these noticings could focus on ideas, key words, etc.).
3. Transform these annotations into emergent themes (list themes along the right-hand margin).

4. List the emergent themes on a separate paper and discover connections between them (themes can be grouped into clusters or according to “superordinate concepts”) (Smith et al., 1999, p. 222).
5. As new connections (clusters) emerge, revisit the interview transcript to ensure they are validated with reference to the primary data.
6. Produce a master list of themes (less relevant themes that do not fit these clusters can be dropped at this point).
7. Repeat steps 1-6 with the next interview transcript, until all verbatim transcripts have been coded in this way.
8. Compare and contrast the master list of themes for each transcript, to produce a more encompassing, final master table of themes (see Appendix F). Master Table A documents the superordinate themes common across the initial teacher interviews, whilst Master Table C documents the superordinate themes common across the final teacher interviews.
9. Translate the themes into a narrative account that uses verbatim excerpts to elucidate each theme.
10. Discuss the themes and their connections to the existing literature (this can include considerations for future research).

3.7.3 Analysing Observational Data

Observational data was transcribed by hand at the time of the lesson observations using printed observation protocols and a field diary. During analysis, these documents were then copied and annotated in accordance with the IPA steps mentioned above (Pietkiewicz & Smith, 2014). Once the emergent themes were uncovered, they were recorded in a separate document and grouped according to the observational fieldnotes and student interviews sourced from the two

Year 8 classes, namely: Year 8 Geography and Year 8 English. Since the impromptu, *in-situ* student interviews were taken during lesson observations on site, the analysis of these interview transcripts and their emergent themes formed part of the qualitative data collected in Phase Two. The *in-situ* student interviews were analysed in accordance with the IPA steps listed above and used to supplement and enrich the data in this phase of the study (Pietkiewicz & Smith, 2014). Emergent themes were then grouped into matching clusters according to ‘like’ themes and used to create the final superordinate themes for each group. The final superordinate themes for each group were tabulated and featured in Master Table B (see Appendix F) which reflects key quotes from interview transcripts and/or observation notes that evidence the resulting seven superordinate themes.

3.7.4 Artifact Analysis

The artifacts collected during this study underwent a process of low-level thematic analysis to identify emergent themes in the data whilst also maintaining the integrity of the poetry that was composed. Thematic analysis involves a rigorous step-by-step method of data immersion, coding, and categorising to identify themes (Dawadi, 2020, pp. 62-63; Green et al., 2007, p. 547). The process of thematic data analysis undertaken in this study is adapted from Dawadi (2020) and is detailed below:

1. Familiarise oneself with the data (data immersion). Read and re-read/view the artifact (data poem or work sample) a few times and within the context of the fieldnotes collected during the lesson. Dawadi (2020, p. 65) stresses the importance of re-reading the data here to fully immerse oneself in the analytical process.
2. Create annotations or notes either using a copy of the artifact (if it is written) or in a separate document. Focus artifact analysis on symbolism, i.e., what the “object presents (the manifest) and represents (the latent) to its creators” and readers/viewers (Saldaña & Omasta, 2018, p. 119)

3. Create codes that can be used to form themes.
4. Discuss themes in a narrative or report format.

As Dawadi (2020, p. 62) states, “a rigorous and trustworthy thematic analysis can produce insightful and trustworthy findings,” yet “there is no clear guidance for early career researchers to conduct rigorous thematic analysis.” This flexibility in how the approach can be adopted bodes well for this research, as it suits the type of artifacts included as part of the qualitative data set. Most of the data collected as artifacts included student poems or ‘data poems’, which demonstrated critically reflective learning in action. Other artifacts collected included written responses (paragraphs), illustrations, and visual spectra (see Chapter Five for examples). As Nielsen (2000, p. 12) suggests, since the researcher is not part of the phenomenon being explored, the “elements of the phenomenon, can be useful in portraying it authentically.” Whilst this is true, the notion that some phenomena can reveal their inner meanings to the researcher without any additional interpretive work is problematic and surfaces an evident limitation, as it assumes that everything the researcher will need to know will be contained within the data. When considering the phenomenon of critical reflection, it cannot voice its inner meanings without interpretive work from the researcher as it is a mental phenomenon, and thus requires a hermeneutic approach to unpack how one experiences it. Nielsen (2004, p. 12) further argues that “to summarise a poem would destroy its original outcome, since the poem itself is the outcome.” However, whilst the poetry was allowed to speak for itself, some analysis was required to connect this learning to the critical reflection that occurred during these lessons. Thus, the analysis conducted to explore these artifacts balanced a level of thematic analysis that could allow the emergent themes to surface, whilst also being careful to avoid decoding or ‘reading into’ the data poems too rigorously to the point where the reader cannot also take part in this meaning-making process.

3.8 Chapter Conclusion

Chapter Three has presented the two main qualitative methodologies adopted in this study (IPA and poetic inquiry) and detailed the specific data collection and analysis methods that were employed. The next chapter will serve as the first of three chapters that outline the key findings of this research and offer a discussion of the overarching themes that evolved from each phase of the study. Chapter Four begins by outlining the findings from Phase One of the study, which featured the initial interviews with teachers before they began teaching their units of work at Moonstone HS.

Chapter Four: Phase One Findings

4.1 Chapter Introduction

This chapter begins with a found poem titled *First Impressions* that I composed using transcript quotes from teachers who participated in the initial interviews in Phase One of the study. The poem begins the chapter as a contemplative piece and offers a poetic montage of the experiences that teachers had with critical reflection before teaching it as part of this study. An explication of the poetic process involved in composing *First Impressions* is then offered to the reader to position them as they enter this first phase of the findings. Proceeding this, a summary of the qualitative findings is presented to the reader. Finally, each of the seven superordinate themes that emerged from the data analysis are then discussed and appraised with reference to key quotes from the teacher participants.

First Impressions

It's beginning with why? questions – to ask why?

have the empathy to listen to different voices

I think it creates depth

wisdom and discernment

actually listening to people you disagree with

and like embracing challenge.

opportunity

very curious

immersed in it.

Giving students voice...free choice.

move the puzzle piece around for themselves.

gut response

being a bit sceptical of things

What do you notice about it?

What do you think?

Have your assumptions changed?

curating questions question generating

go deeper into the questioning

Has your perception changed?

I go into the classroom,

I give the students that time,

I'm thinking aloud,

listen.

coherence makers can be a bit overwhelming when presented to students with nothing before.

I'm trying to work through it at the same time.

Keep re-shifting that frame of reference;

show students a range of perspectives and voices and narratives

compositions

students thinking aloud about the bias that they might bring to a text

the way we think

the way we learn.

Model a few assumptions

get a taste or flavour of it

feel safe

words written by someone else,

curated by them.

Become alert to something in their world

build new ideas

create own meaning

convey understanding

Help solve...

I have chosen to begin this chapter with a found poem composed using a selection of key words and phrases that were quoted by Jeremy, Dominique, and Violet in the initial interviews. These quotes were tabulated to create Master Table A, to best represent the seven superordinate themes common across the initial interviews conducted with teachers in Phase One of this study. When it came to interviewing participants on this subject for the first time, most participants experienced some trepidation towards their inexperience with teaching critical reflection when entering a study that was exclusively investigating this phenomenon in their classrooms. Like many qualitative researchers who employ found poems to begin their discussions (Furman, 2004; Furman et al., 2007), this first poem articulates the lived experiences of my participants and captures their thinking process as they ‘talk-out’ their initial definitions, feelings, and understandings of critical reflection, its manifestations in their classrooms, and what it means to their practice.

Unlike traditional found poetry that lifts lines of a transcript from a single participant interview to use as the basis for a poem (Glesne, 1997; Robinson, 2022), the found poetry that features in this study is derived from several transcripts contained within selected phases of the study, in other words, a “poetic montage” (Leavy, 2010). Whilst this is uncommon, it allowed me to work within the parameters of a multi-method research framework that blended hermeneutic phenomenology with poetic inquiry in a versatile way. Doing so importantly pays homage to the ideographic process of IPA that was conducted to produce each master table, which distils the emergent themes found across each transcript into superordinate themes that reflect the main ideas common to each teacher’s initial understanding of and experience with teaching critical reflection. In their guide to IPA research, Smith et al. (2009, p. 108) note that “there is not a single right way to write up an IPA analysis.” The authors acknowledge that writing is a creative and idiosyncratic process, particularly as the proliferation of multi-method research

that pairs IPA with an arts-based approach like poetic inquiry, will adopt a more versatile approach to the representation and discussion of data (Smith et al., 2009).

What I aimed to preserve in the explication and representation of my data, is how the superordinate themes across each phase of the study revealed my participants' journey towards critically reflective teaching in a creative way. In this first poem, I honour my participants' words and phrases with a particular focus on the emotionality and introspective provided about their initial understanding of the critical reflection process when teaching Stage 4 English. I did not contribute my own words to this poem, as I am well-versed in the research surrounding this phenomenon and did not wish to skew my participants' voices. My contributions to the creation of this poem lay solely in my arrangement of these words to form the lines and line breaks in the poem, whilst also adding punctuation to capture and shape these first impressions for the reader. In this way, I influenced the poem's form by composing it in free verse. Similarly, I influenced the way the poem is read by arranging the words and phrases in a way highlights the participant's key ideas and initial impressions.

By engaging in reflective practice to discuss my findings, I acknowledge that my experience as the interviewer and participant-observer is bound to the interpretive process of this IPA study. This will help situate my findings within the narratives and lived experiences of these secondary teachers in their classrooms. I will do this by tracing a trajectory of the three phases of this study: the initial interviews and planning session, teaching and classroom observations, and final interviews, and circle back to key moments with teachers and students as they think about and engage in critical reflection.

To begin the journey into the Phase One of this study, I reflected on the initial interviews that took place between myself and the teacher participants before they convened as a group and begun planning and teaching their respective Year 8 classes. The decision to include an initial interview phase as part of this study offered me the opportunity to hear each teacher participant's own unbiased understanding of critical reflection and gather the level of experience they had teaching this capability using a 4Cs approach. This also allowed me to gauge how confident each teacher was with the 4Cs approach and the extent of their professional learning surrounding the 4Cs approach and its implementation at Moonstone HS.

To prioritise these teacher narratives in the exploration of critical reflection as a transformative and creative capability, I offered teachers a private and honest space to reveal their own understandings and assumptions about critical reflection. I also encouraged teachers to voice their personal aspirations as participants through these initial interviews. Whilst conducting these interviews, most teachers voiced a desire to grow their confidence and capability to teach critical reflection and discover how this can be implemented through the steps of the Crucible coherence maker and various 4Cs processes applied in the classroom. For others, this experience provided them with an experimental space to traverse the creative dimension within critical reflection and challenge what they already knew by using poetry as a tool to spark critical reflection amongst their learners.

Prior to conducting the initial interviews with teachers, I undertook my own written reflection using a field diary to unpack my preconceptions before beginning the interview process. I approached this reflective writing process by making 'I' statements about what I already knew and felt about the study (seen below), as well as some considerations I expected to directly influence my interpretation of the data. Unpacking these preconceptions and translating them

onto the page is an important step of the hermeneutic process and is the first step the researcher takes to familiarise themselves with the data when using an IPA method (Smith et al., 2009). As previously stated in Chapter Three, I adopted the first-person voice to begin this chapter to acknowledge my unique interpretive role in the collection and analysis of the data as an IPA researcher. Some of these statements have been compiled in dot point form below to make the hermeneutic process I undertook more transparent to the reader and fellow IPA researchers.

- I have researched about critical reflection and recently published on the topic
- I have a close relationship with the topic both as a researcher and educator
- I am passionate about writing poetry and finding a link between critical reflection and poetry- this seems logical to me but may not be for my research participants
- I need to be aware of the language that I use to describe critical reflection in the interview so that I don't confuse participants- this stems from my extensive immersion in the research literature
- I need to accept that not all teachers will be well-versed in their teaching and understanding of the 4Cs Crucible coherence maker due to the timing of this study
- I need to be aware of how much experience each teacher has with the 4Cs approach and the Crucible coherence maker in general

To briefly revisit the process of data analysis at this phase of the study; each transcript was transcribed using a software program, coded through the process of initial noting, and emergent theme clusters were formed using colour-coding (see Figure 4.1). The emergent theme lists for each transcript were then translated into superordinate themes and tabulated to include quotes from the transcript to evidence each theme (see Figure 4.2). These superordinate themes were selected for their value and overall relevance to answering the research question/s.

Figure 4.1

A section of the Emergent Themes List from Jeremy's Initial Interview

- Emergent Themes List: Clustering Like Themes through Subsumption**
1. The importance of critically reflecting alone and together
 2. Listening to others
 3. Always asking questions
 4. Revisiting ideas students might have had in the past and building on knowledge
 5. Collegial discussions as a form of critical reflection
 6. Critical reflection can take the form of immediate thoughts and feelings post-lesson
 7. Critical reflection through a deep consideration of one's teaching ethos
 8. Critical reflection is practised by students through discussion-based and written means
 9. Questioning and responding to questions as a predominant form of critical reflection
 10. Posing *What* questions concerning thoughts, observations and feelings
 11. Using hypothetical scenarios and considering different outcomes to critically reflect
 12. Revisiting content through questions to see what has changed
 13. A desire for students to question, reflect and be sceptical of the things they engage with
 14. Looking at a range of different viewpoints
 15. Step back and view things critically
 16. Explicit teaching of critical reflection as a challenge to embark on
 17. Lack of 4Cs training
 18. Little experience with teaching critical reflection using the crucible coherence maker
 19. Personal confidence with 4Cs knowledge is limited
 20. Lack of confidence with explicit teaching using the crucible

The superordinate themes that were derived from each interview transcript were then tabulated and colour-coded (see Figure 4.3) to form the first master table (Master Table A) of superordinate themes (see Figure 4.4), which represented the six superordinate themes that were recurrent across two or more interview transcripts. New superordinate theme titles were formed during this process and at least two quotes from each transcript were included to evidence these six themes.

Figure 4.2

A section of the Table of Superordinate Themes for Dominique's Initial Interview

Table of Superordinate Themes from Dominique's Initial Interview in the Study		
Superordinate and Subordinate Themes	Page/line	Quote
Building one's understanding of critical reflection	1.22-23	what I hope to get out of it is, is building my understanding of critical reflection
Defining critical reflection	1.10-11	initially trying to differentiate between critical thinking and critical reflection
Implicit teaching of critical reflection	6.197	I think there was a lot of critical reflection initially
Fear of not being 'academic' enough	9.309-310	I guess what makes me nervous sometimes is that I'm not as academic as some of the other teachers
Fear of missed learning opportunities	9.311-312	I kind of need to have a, a direction to go in, or I might miss those opportunities
Assumptions about critical reflection	1.32-33	pretty cool reflection maybe happens better or more often in top classes
Critically reflecting in English	1.13-14	it's about students thinking about the bias that they might bring to a text
Textual choices offer diverse perspectives	6.185	it was an ad, a Lego ad that's called 'Everything's not awesome'
Textual choices showcase diverse experiences	6.195-196	it's about a little boy growing up in Afghanistan that then his family migrate to America
Textual choices prompt curiosity and interest	6.212	the kids were really immersed in it. They were very curious
Textual choices influence critical reflection	6.213-214	then they were going back looking at things in the media or talking about which media sources were reliable
Textual choices invite critical reflection	8.267	in terms of contesting the text, definitely the ending
Contesting assumptions about texts	8.278	we could've used that as an opportunity to... to stop and get sort of...
Opportunities to deepen reflection about English texts	8.283-284	I find sometimes with units that we teach in English, we just have to rush through
Challenges when critically reflecting in English	14.506-507	there'll be some avenues there to talk to them about Indigenous culture, but also different experiences...
Exposing students to new experiences through texts	15.525	Yeah, controversial in a sense
Textual choices can seem controversial to students	15.526	These units to do with Australian poetry. It's great that there's a bit of variety there
Favouring a variety of textual forms and experiences	16.556-557	texts, from a different gender point of view or from a different...from a different cultural point of view...
Exploring gendered and cultural perspectives through texts	16.561-562	they struggle with is when we go, okay, here's a text, we are looking at our topic, go off and find your own texts.

Note. This figure only shows a section of the Table of Superordinate Themes from Dominique's initial interview, detailing the first two superordinate themes that were found. The complete table can be found in Appendix E.

Figure 4.3

The process of identifying cross-interview superordinate themes in the initial interviews

Process of identifying cross-interview superordinate themes		
Dominique	Jeremy	Violet
<p>1. Building one's understanding of critical reflection</p> <p>Defining critical reflection</p> <p>Implicit teaching of critical reflection</p> <p>Fear of not being 'academic' enough</p> <p>Fear of missed learning opportunities</p> <p>Assumptions about critical reflection</p> <p>2. Critically reflecting in English</p> <p>Textual choices offer diverse perspectives</p> <p>Textual choices showcase diverse experiences</p> <p>Textual choices prompt curiosity and interest</p> <p>Textual choices influence critical reflection</p> <p>Textual choices invite critical reflection</p> <p>Contesting assumptions about texts</p> <p>Opportunities to deepen reflection about English texts</p> <p>Challenges when critically reflecting in English</p> <p>Exposing students to new experiences through texts</p> <p>Textual choices can seem controversial to students</p> <p>Favouring a variety of textual forms and experiences</p> <p>Exploring gendered and cultural perspectives through texts</p> <p>Developing independent consumers of texts</p>	<p>1. A process of challenging assumptions</p> <p>Always asking questions</p> <p>Questioning and responding to questions as a predominant form of critical reflection</p> <p>Posing 'What' questions concerning thoughts, experiences and feelings</p> <p>Revisiting content through questions to see what has changed</p> <p>A focus for students to question, reflect and be sceptical of the things they engage with</p> <p>2. Critiquing the self</p> <p>The importance of critically reflecting alone and together</p> <p>Critical reflection can take the form of immediate thoughts and feelings post-lesson</p> <p>Critical reflection through a deep consideration of one's teaching ethics</p> <p>Explicit teaching of critical reflection as a challenge to embark on</p> <p>3. A discursive approach to critical reflection</p> <p>Critical discussions as a form of critical reflection</p> <p>Critical reflection is practised by students through discussion-based and written means</p> <p>Rounds of discussion promoted by questioning and revisiting previous assumptions (on a topic/idea)</p> <p>Discussing with passion and enthusiasm</p>	<p>1. A process of challenging assumptions</p> <p>Grappling with why assumptions are held</p> <p>A process of becoming alert to or aware of assumptions</p> <p>Challenging assumptions through drawing</p> <p>Modelling how to provide an assumption</p> <p>Identifying assumptions as a way to model it for students</p> <p>Types of assumptions</p> <p>Helping students identify assumptions in the context</p> <p>Building student confidence to recognise their own assumptions</p> <p>Re-shifting their frame of reference</p> <p>2. Critically reflective processes intertwine thought and action</p> <p>Critical reflection as a generative process</p> <p>Critical reflection has a level of wisdom and discernment to it</p> <p>Reflection in thought and in action forms part of CR</p> <p>Wisdom-in-action</p> <p>Critical reflection as a process</p> <p>Being a global citizen ties critical reflection to action</p> <p>A challenge involves curating space for students to think, act or create</p>
<p>Questioning to critically reflect</p> <p>8. Guided approach to teaching and learning</p> <p>Students need guidance</p> <p>Co-constructing new knowledge</p> <p>9. Building cultural knowledge through critical reflection</p> <p>Learners see 1972 monocultural</p> <p>Exposing students to different narratives of Australian identity</p> <p>10. Prioritising engagement?</p> <p>Student interest and engagement</p> <p>Different approaches for engagement</p> <p>11. Strategies for encouraging communication</p> <p>Needling to reference the coherence maker</p> <p>Implicit rather than direct teaching of critical reflection</p> <p>12. Poetry as a reflective</p> <p>Approaching conceptually challenging texts through poetry</p> <p>Building new ideas through poetry</p> <p>Challenging assumptions through poetry</p> <p>Seeing as a form of poetry</p>	<p>4. Exercising empathy</p> <p>Empathy skills</p> <p>Strong emotional intelligence</p> <p>Poetry as a way to empathise with new situations</p> <p>Questioning to build empathy</p> <p>5. Critically reflecting with different ability groups</p> <p>Reflection on teaching approaches</p> <p>Small group work to encourage engagement</p> <p>Approaches to demonstrating their reflection</p> <p>Low risk-taking in learning</p> <p>Encouraging risk-taking</p> <p>Trials of 'good' critical reflectors</p> <p>6. Building rapport</p> <p>Building strong relationships with students</p> <p>Knowing your students</p> <p>Building a safe learning environment</p> <p>Building confidence in learners</p> <p>Learners have limited experiences</p> <p>7. Building approaches to confidence</p> <p>Questioning strategies for deep reflection</p> <p>Critical questioning</p> <p>Critical questioning to unpack PDVA</p>	<p>Students are not always up for discussion about their thoughts/feelings</p> <p>Being respectful and listening to others during discussion</p> <p>Building a space for good, genuine discussion</p> <p>A willingness from students to vocalise their thoughts and feelings</p> <p>Apathy - students can be unwilling to share their ideas</p> <p>Apathetic attitude towards deep sharing of thoughts/feelings</p> <p>A hope that students will get more vocal</p> <p>Keeping the lines of communication open</p> <p>Listening to others</p> <p>3. Power and privilege shapes our context and assumptions</p> <p>Focusing learning <u>around</u> students' expertise and agency</p> <p>It can be challenging to notice power and privilege in the curriculum content</p> <p>Students' 'becoming awake' to their own agency and the agency/power of others is exciting</p> <p>4. Multiple perspectives enrich learning</p> <p>Perspectives used in activities to drive critical reflection</p> <p>Multiple perspectives offer a fuller or wider picture</p> <p>Broadening the student's field of vision both physically and metaphorically</p> <p>Exploring diverse perspectives creates depth and wisdom</p> <p>Diverse perspectives can come from the teaching process and the curriculum content</p> <p>5. Poetry opens up a space for diverse perspectives to be explored</p> <p>Poetry has the potential to generate new insights</p> <p>Blackbox poetry is accessible and a seamless way of creating</p> <p>6. Images as provocations for critically reflective learning</p> <p>Images and visualisation as a process of critically reflective learning</p> <p>Images provoke students to deeply consider an assumption</p>
<p>Use poetry to critically reflect about Australian history</p> <p>Increase engagement and teacher buy-in to increase student buy-in</p> <p>Exploring existing interest from students</p> <p>Ensuring students have the tools to compose their own poetry</p> <p>Using hypothetical scenarios and considering different outcomes to critically reflect</p> <p>Encouraging safe but forced interactions between learners using 4Cs processes</p> <p>It's not just about pulling apart 'seamlessly' neat syllabus dot points - teaching is more than that</p> <p>10. Using the crumble coherence maker</p> <p>Using the crumble to pose overarching questions to be resolved as a unit of work</p> <p>The crumble can be applied in a dynamic way</p> <p>Warm-up activities help students engage with the coherence maker before they use it</p> <p>Approaching content with a 'fresh openness' after engaging with a coherence maker</p> <p>The coherence maker is something in action</p> <p>Scaffolding a complex capability</p>	<p>8. Idea of protected thinking and talking time</p> <p>Protected time encourages and promotes engagement</p> <p>Protected time values the student's time</p> <p>Protected time promotes deep listening</p> <p>More time to create, think and express oneself</p> <p>Protected time to speak in a form of action - it's critically reflective</p> <p>Using protected time can be challenging</p> <p>Teacher observations and ability to model learning during protected activities is important</p> <p>Respecting the process of protected time through silence</p> <p>Protected time is survivable and achievable for students</p> <p>More opportunities for students to reflect</p> <p>9. Processes are participatory</p> <p>Stepping up and into a process</p>	<p>Use poetry to critically reflect about Australian history</p> <p>Increase engagement and teacher buy-in to increase student buy-in</p> <p>Exploring existing interest from students</p> <p>Ensuring students have the tools to compose their own poetry</p> <p>Using hypothetical scenarios and considering different outcomes to critically reflect</p> <p>Encouraging safe but forced interactions between learners using 4Cs processes</p> <p>It's not just about pulling apart 'seamlessly' neat syllabus dot points - teaching is more than that</p> <p>10. Using the crumble coherence maker</p> <p>Using the crumble to pose overarching questions to be resolved as a unit of work</p> <p>The crumble can be applied in a dynamic way</p> <p>Warm-up activities help students engage with the coherence maker before they use it</p> <p>Approaching content with a 'fresh openness' after engaging with a coherence maker</p> <p>The coherence maker is something in action</p> <p>Scaffolding a complex capability</p>

Figure 4.4

A section of Master Table A evidencing the six superordinate themes found in Phase One

Master Table A: Participants' Initial Interviews (Phase 1)						
Superordinate Themes	Jeremy		Dominique		Violet	
	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.
1. The process of critical reflection	move the puzzle piece around for themselves	9.298-299	I think there was a lot of critical reflection initially	6.197	reflection in thought and in action is kind of my understanding of... my gut response to critical reflection	1.21-22
	have the empathy to listen to different voices	9.298	initially trying to differentiate between critical thinking and critical reflection	1.10-11	like there's some kind of element of wisdom or discernment in critical reflection, as well as the challenge and thought	1.19-21
2. Critically reflective teaching and learning using the 4Cs approach	giving the students voice...free choice of poems	9.281	it's about students thinking about the bias that they might bring to a text	1.13-14	what do you notice about the coherence maker? Like, what do you notice about it? How could it be relevant? How could it help us solve the water crisis?"	7.234-36
	and using...those compositions as a way to do some critical reflection	9.284	the kids were really immersed in it. They were very curious	6.212	I've noticed like the, the coherence makers can be a bit overwhelming... when presented to students with nothing before	9.301-2
3. A multi-perspectivist approach to teaching	show students that there are a range of perspectives and voices and narratives out there	9.294-295	maybe being open to different interpretations of a text	1.15-16	for example, the asylum seeker documentary gave my students an opportunity not to say they're dumb and stupid, but to listen and to ask why?	11.370-71

Note. This figure only shows a section of Master Table A, which details the first three superordinate themes that were found in Phase One of the study. Six superordinate themes were found and represented in Master Table A, which can be found in Appendix F.

The six superordinate themes that were found in the initial interview phase of the study, as featured in Master Table A are listed below:

1. The process of critical reflection
2. Critically reflective teaching and learning using the 4Cs approach
3. A multi-perspectivist approach to teaching critical reflection
4. Curating questions that promote critical reflection
5. A guided approach to challenging assumptions through critical reflection
6. Poetry as a tool for critical reflection

Each superordinate theme is explored in greater detail below. Please note that each theme is discussed in the order they are listed above. However, some theme titles below have been reworded to account for the insights revealed by each teacher's account of their experience at this initial phase of the study.

4.3 The Process of Critical Reflection

When I began the study, an assumption that Dominique had about the reflective process captured the confusion that many educators experience when thinking about the process of critical reflection. When asked to consider what comes to mind when thinking about critical reflection, Dominique (Initial Interview with Dominique, 2022, lines 10-11) began the interview by acknowledging, "For me, probably the hard thing is trying...initially trying to differentiate between critical thinking and critical reflection." Dominique subsequently notes how when she reflects on what she does in her English classroom, she believes this "is more critical thinking," rather than critical reflection. What is striking about Dominique's reflection of her teaching is that it pinpoints a fundamental part of the critical reflection process: critical thinking. As Winch (2005, p. 6) discusses, "the ability to critically reflect on one's choices requires the ability to think critically about those choices." In other words, critical thinking must come before critical reflection to inform the action taken by the individual as they deeply process the knowledge they have gained from a single learning experience. As Dominique reflects on her understanding of critical reflection, it is clear how her educational background and pedagogy as an English teacher has shaped her definition of this capability. Dominique adds to her reflection by stating that:

So, critical reflection to me... it's about students thinking about the bias that they might bring to a text or, their own position before they start reading into a text, but being aware of what they know, what they don't know, maybe being open to different interpretations of a

text, maybe students taking risks or being... being ready to, to realise, not realise that you're wrong, but having that flexibility there (Initial Interview with Dominique, 2022, lines 13-17)

Dominique's reference to bias is notable as it highlights the preconceptions that come into play during textual analysis and deconstruction that offer English students the opportunity to practise deep reflection, and by extension deep learning (QTM, NSWDOE, 2024). Dominique's understanding of critical reflection puts the learner's interpretation of a text and the presumptions they bring to this textual analysis at the forefront. Thus, bias is an important consideration for the learner when critically reflecting. Although the learner cannot escape their own bias, it is crucial that English students become aware of the biases they bring to a text, as Dominique states. Furthermore, the ability to "being open to different interpretations of a text" requires open-mindedness and a willingness to listen and learn; these are key empathetic skills that are involved in the critical reflection process (Initial Interview with Dominique, 2022, line 14).

When considering the competencies that students require to critically reflect, the ability to 'build new ideas' promotes creativity and the capacity to problem-solve and generate new learning that is actionable (Jefferson & Anderson, 2017). Both Violet and Jeremy highlight this idea in different ways. Jeremy's understanding of critical reflection draws on the practice of questioning, revisiting ideas, and building on the knowledge that is learnt. Although Jeremy is new to this explicit teaching of critical reflection through the 4Cs approach, he noted how many of his teaching strategies integrate opportunities for student reflection and building on knowledge previously learnt. Jeremy notes how for him, critical reflection involves:

always asking questions..., listening to, to others, kind of coming back to certain ideas that you might have had, that students might have had in the past. And seeing if anything's, anything's changed kind of always building on, kind of making sure things aren't happening standalone trying to build on them. (Initial Interview with Jeremy, 2022, lines 13-16)

This cyclical nature of questioning, building on new knowledge, and re-visiting ideas that Jeremy discusses, allows students to see knowledge as connected and purposeful. In a 4Cs approach, this connects to the idea of deep learning (Jefferson & Anderson, 2017, p. 53). Jefferson and Anderson argue that “deep learning is the process of developing durable and transferable knowledge,” where knowledge is applied and tested in new learning situations. This importantly supports students to strengthen their long-term memory, thereby benefitting their working memory as they problem-solve during a learning task (Jefferson & Anderson, 2017, p. 53).

In the Stage 4 English classroom, an example of how deep learning can be enacted to support critical reflection is through imaginative re-creation activities. Imaginative recreation takes a text and imagines the different ways that learners can engage with its form, language, and ideas to build deeper understanding (Rifqi, 2023). Essentially, imaginative re-creation is “a creative process of re-creating (part of) a literature text in such a way that helps learners to expand their understanding and appreciation of a specific text and to express a considered response to it” (Rifqi, 2023, p. 283). When reading a literary text in English, most teachers default to comprehension tasks that can be monotonous and de-motivating for learners (Rifqi, 2023). Imaginative re-creation tasks are used by English teachers to advance the way knowledge gained from reading a literary text can be applied in new ways to support students to create their own texts. For example, this could involve re-telling a story from a different perspective,

re-writing the ending of a story, or role-playing a moment in a story with alterations to the characters, setting or context. As Jeremy argues, making time for questioning to come back to the knowledge gained from a student's reading of the text is vital, as this primes the space for critical reflection to occur. The creativity and potential for reflection during these tasks highlights them as strategies for promoting critical reflection amongst Stage 4 English learners, particularly as their principal aim is to encourage students to apply and transform the knowledge taken from their reading of a text.

When approaching curriculum content, a key question posed by this study was to explore how the teaching of knowledge and skills from multiple perspectives, voices and/or narratives can facilitate critical reflection amongst Stage 4 students. The enthusiasm with which this question was answered by each teacher revealed their passion and willingness to expose their students to learning experiences that highlight diverse voices, conflicting perspectives, and thought-provoking narratives about the human experience. For Jeremy (Initial Interview with Jeremy, 2022, lines 299-300), critically reflecting through such a multi-perspectivist lens involves students "having the empathy to listen to different perspectives" to "mov[e] the puzzle piece around for themselves... [and] decide how they feel." The analogy of the puzzle piece places significance on the autonomous and participatory nature of knowledge creation in the 4Cs classroom.

Connecting these dots through critical reflection involves a certain amount of "wisdom or discernment... as well as challenge and thought," as Violet identified in her initial interview (2022, lines 20-21). Although adolescents may not have the same level of wisdom and discernment that is bestowed to them in adulthood, they can garner this through their exposure to new ideas and perspectives in the classroom (Hecht et al., 2021). Similarly, the ability to

discern right from wrong and develop a well-informed opinion about a person or topic requires practise and can be nurtured early to promote the evaluative and analytical thinking skills required by learners as they enter senior school (Ammann, 2018). The ‘challenge’ Violet refers to here can be interpreted in two ways. Firstly, the teacher must expose students to ideas, perspectives or narratives that challenge their preconceptions about the world to ‘test’ and strengthen their knowledge. Encountering this step in the Crucible is arguably the most challenging, as learners will inevitably find the process of coming to terms with their assumptions confronting and highly personal (Jefferson & Anderson, 2017, pp. 95-99). Creating a safe space for critical discussion and the sharing of different opinions is vital, yet may not be enough to soften the blow for some students for whom the emotionality of this process can be overwhelming. However, if, as Violet (Initial Interview with Violet, 2022, line 35) offers, students are given adequate “space and time to think” as they critically reflect, the teacher can support them to find the language to share and discuss their opinions in ways that are constructive and empathetic to the emotions of those they are conversing with. The process of getting to know one’s students so that teachers can effectively work with them to understand and practise critical reflection will take time and can be especially difficult for secondary teachers who change classes on a semesterly or yearly basis. If these social and emotional skills are developed in the primary years, both students and secondary teachers will be better equipped to focus their efforts on extending rather than developing these skills once students enter Year 7.

4.4 What can Critical Reflection look like using a 4Cs Approach?

The 4Cs approach favours a transdisciplinary approach to teaching and learning that shapes knowledge around student interest, questions, and concerns, and allows learners to apply both disciplinary and interdisciplinary skills in real-world situations (Jefferson & Anderson 2017,

p. 37). A common view that surfaced during the initial teacher interviews was a desire to offer students more agency and a voice during learning. Dominique and Jeremy both expressed a strong belief that the selection of texts being offered to their Year 8 English students played a crucial role in their ability to critically reflect (Initial Interview with Dominique, 2022; Initial Interview with Jeremy, 2022). Textual choices are essential to the discipline of English, as sourcing and teaching quality texts form the ‘bread and butter’ of the English teachers’ profession. As Dominique (Initial Interview with Dominique, 2022) argued, these texts need to represent a diverse array of human experiences so that students are exposed to different perspectives and points of view (POVs) that can spark their thinking and challenge their frame of reference. In her *New Literature Companion for Teachers*, McDonald (2023, p. 15) discusses what English teachers should consider when selecting quality texts for their primary and secondary classrooms, asserting how quality texts should have a level of complexity and offer “a range of cultural and diverse genres, contexts, themes or purposes.” This sentiment is echoed by Dominique (Initial Interview with Dominique, 2022, lines 556-557) who spoke about exposing students to texts “from a different gender point of view or from a different cultural point of view.” For Dominique, these types of texts form a rich tapestry of human experiences that prime students for deep reflective learning opportunities, including critical reflection.

Textual choices should also provoke student curiosity and interest, whilst also being immersive and thoughtful so that they generate discourse around different ideas, peoples, and issues. Dominique noted how she had previously taught a text titled, *LEGO: Everything is Not Awesome* (Greenpeace International, 2014) with her Year 8 English class, which prompted students to conduct their own research about the topic on the issue of sustainability. For example, students “were going back looking at things in the media or talking about which media sources were reliable (Initial Interview with Dominique, 2022, lines 213-214). This

video was part of a campaign by the environmental group Greenpeace, who released the short YouTube video as a direct response to Lego's outstanding partnership with the oil company Shell, when Shell announced a proposal to drill for oil in the Arctic in 2014. Dominique observed that students were very immersed in the text and provoked by its strong environmental message, which also lay at the core of the unit of work she was teaching at the time. However, Dominique (Initial Interview with Dominique, 2022) regretted not capitalising on more opportunities to deepen reflection about this text and the issues it raised with her students, as she felt she had to rush through the content in a limited amount of time. This reality was felt by all three teachers, who continually balanced the desire to integrate more opportunities for deep reflection into their teaching, whilst also trying to meet syllabus requirements. Opportunities for deep learning and reflection should be prioritised by teachers, as this paves the way for transformative learning to occur, yet the current teaching model in most Australian secondary schools makes this arduous (Jefferson & Anderson, 2017).

Prioritising engagement is another important consideration for teachers, as it holds the potential to facilitate critical reflection. When initially considering how poetry can be used as a critically reflective tool, Jeremy (Initial Interview with Jeremy, 2022) spoke about selecting poets that were relatable for learners, both in their style of poetry and life experience. Jeremy urged that when students connect and find relatability with the authors and texts they are studying, there is increased engagement and investment in the learning process, which makes students more "willing to critically reflect" (Initial Interview with Jeremy, 2022, line 276). To do this, Jeremy spoke about potentially offering students more 'buy-in' through the text selection process by proposing that teachers outside of the English faculty offer up their own poetry anthology that students could tap into. Another possibility was conducting a pre-unit survey to see what poems and/or poets students were reading to gauge existing interest from the student cohort, to then

shape textual choices during programming. Although this was not achieved due to the limited scope of this study, Jeremy raised some interesting strategies to increase student agency in the text selection process (Initial Interview with Jeremy, 2022). When surveying possible texts for the upcoming Year 8 poetry unit, it was clear that the English teachers selected texts that resonated with the context and culture of the school. Teachers were opting to select poets who were known to students, like the Aboriginal Australian rapper Baker Boy, or topics that resonated with the 'surf culture' that many students had grown up with in this coastal town. This desire to develop students who are independent consumers of texts is also voiced by Dominique (Initial Interview with Dominique, 2022), who observed the difficulty experienced by her previous Year 8 students when they were given the chance to source their own texts. Dominique (Initial Interview with Dominique, 2022, lines 561-562) states that, "[what] they struggle with is when you go, okay, here's a text, we are looking at our topic, go off and find your own texts." Despite having this process modelled to them through the teaching of mentor texts, Dominique noticed that once students reached Year 9 and 10, they did not have the confidence to independently source their own supplementary texts. Teaching students how to critically reflect in the early stages of high school can provide them with the evaluative and critical thinking skills to be able to source their own texts, or source a text that offers a unique perspective, especially when searching for texts online. Dominique's (Initial Interview with Dominique, 2022, lines 571-572) desire for this Year 8 English class was to provide opportunities for her students to see how poetry has evolved online, as "social media opens those avenues there where we can see different voices, different avenues through that new technology."

The Crucible coherence maker is an important teaching and learning tool that can be used to facilitate the critical reflection process through the 4Cs approach. Although Violet

acknowledged that she had used the Crucible coherence maker less so than the others, she noticed that the Crucible could be used in a very actionable way in the classroom. When teaching Geography, Violet (Initial Interview with Violet, 2022, lines 234-235) remarked how she incorporated the Crucible into learning activities in various ways, for example, by asking students, “what do you notice about the coherence maker? Like what do you notice about it? How could it be relevant? How could it help us solve the water crisis?” Here, the Crucible was being used with this Year 8 class to frame overarching questions about a unit of work centring around the water crisis. This prompted students to take ownership over the Crucible by considering how they could use it to learn in Geography, rather than it being given to them to use in a very specific way by their teacher.

In one instance, Violet (Initial Interview with Violet, 2022, line 322) recalled how students engaged with the Crucible after an activity with a ‘fresh kind of openness’. In this activity, Violet took her class outside, and using a random online word generator, asked them to relate the chosen word to their topic about the movement of people, with a focus on refugees seeking asylum in other countries. The word chosen was, ‘Monarch butterfly’, a word which Violet believed would stump a lot of her students. However, Violet’s least engaged learner surprised her by speaking about the migration patterns of the Monarch butterfly, which sparked an interesting discussion about connections between people, places, and things. Afterwards, Violet (Initial Interview with Violet, 2022, lines 322-323) had students engage with the Crucible through a documentary and post-viewing activities and noted how they approached the learning with “a fresh kind of openness...a willingness to...connect with that coherence maker.” Violet (Initial Interview with Violet, 2022, line 330) was very passionate about using the Crucible in a hands-on way in her classroom, asserting that she was determined to get the coherence maker posters that appear in most classrooms in Moonstone HS “off [her] walls” and use them in a

substantial way with her students. For Violet (Initial Interview with Violet, 2022, line 336), the critical reflection Crucible is “something in action”, as it helps teachers to understand and teach the metalanguage around critical reflection and the process of exposing, sharing, and challenging assumptions. The result of this learning must be actionable (Jefferson & Anderson, 2017, p. 95). Violet took this very seriously in her classroom, and was determined to link it to her units in a way that allowed students to see the possibly and impact of their actions as geographers and global citizens through this learning.

4.5 Teaching through Multiple Perspectives, Narratives, and Voices

As a consensus, all three teachers expressed that approaching teaching in their subjects from multiple perspectives, narratives, and voices can and does enrich learning for students, and by doing so, provides the fuel for critical reflection (Initial Interview with Dominique, 2022; Initial Interview with Jeremy, 2022; Initial Interview with Violet, 2022). When considering the pedagogical role that narrative plays when introducing diverse viewpoints, experiences, and perspectives in our classrooms, the NSW QTM (NSWDOE, 2024) offers a good starting point. For over two decades the NSW QTM (NSWDOE, 2024) has informed programming and planning, as well as lesson delivery, assessment, and teacher professional learning for primary and secondary state educators. Broken into three dimensions, each with their own interconnected elements, the QTM interweaves different pedagogical approaches that when applied consistently and holistically, form the basis of quality teaching. The third dimension, “significance”, speaks of using narrative as a pedagogical approach that is actualised when teachers make use of “stories written, told, read, viewed or listened to help illustrate or bring to life the knowledge that students are addressing in the classroom” (NSWDOE, 2024). Two things are notable here for how secondary teachers view narrative as part of the critical reflection process. Firstly, narrative is defined in terms of its multimodality as a medium of

knowledge acquisition in the classroom. This means that students must be exposed to the narrative modes mentioned above to fully appreciate the way language is used to create and communicate meaning in our 21st-century world. This also invites students to share and craft their own narrative/s to bring significance to their learning experiences and support them to develop key language skills to communicate their ideas, assumptions, and perspectives.

Narrative also has the power to connect students to their past, present, and future selves, whilst bringing them closer to the lives of others. In her Year 10 Geography classroom, Violet (Initial Interview with Violet, 2022) recalled how her use of the Australian documentary series *Go Back to Where You Came From* (O'Mahoney et al., 2011) opened her students' eyes to the experiences of asylum seekers residing in Australia. Violet (Initial Interview with Violet, 2022, line 370-371) mentioned how "the asylum seeker documentary gave my students an opportunity not to say they're dumb and stupid, but to listen and to ask why?" Using this narrative as the foundation for critical reflection invited students to move past their initial responses to the individuals in the documentaries and engage in deep conversations about why these people held such controversial perspectives towards asylum seekers. This type of learning assists students to draw connections to the world beyond the classroom and prepare them for the differences people share in their own multicultural and multilingual nation. The blending of narrative and critical reflection as two distinct yet interrelated pedagogies has the power to nurture our youngest secondary learners into conscious and informed global citizens who can begin to question 'why?' to unearth deeper layers of knowledge and understanding once they finish high school.

Perspective is commonly understood as the lens through which we view the world and the assumptions, ideas, values, and beliefs that have contributed to our unique viewpoint since

birth. By engaging with different perspectives, students acknowledge the existence of other viewpoints that may or may not completely agree with their own. As students begin to broaden their worldview and knowledgebase by encountering perspectives that interest, confront, challenge, or perplex them, they are forced to come to terms with how others see the world in comparison to themselves. This is an important part of students' social and emotional learning, especially as they come to understand more about themselves and their world. When asked if and how approaching curriculum content from multiple perspectives, narratives or voices can enrich student learning, Jeremy (Initial Interview with Jeremy, 2022, lines 294-300) expressed,

Well, I'd go with a resounding yes! Uh, how can it? Well... I think it's just essential that we do show students that there are a range of perspectives and voices and narratives out there. That's the real world. And so, we are giving them a little snapshot into that. And I guess that's essentially what, it's essential to critical reflection that they take information from a range of places, have the empathy to listen to different voices and then kind of do their, move the puzzle around for themselves and decide how they feel about certain things. Once they've been exposed to a range of information and voices.

Jeremy's (Initial Interview with Jeremy, 2022) resoluteness in the belief that students must be exposed to diverse perspectives, narratives, and voices in their learning is revealed by his statement, "that's the real world" (line 296). This statement is terse and provocative, as it reorients teachers towards a key aim of education: to prepare students for the reality of life outside of school. The emphasis Jeremy placed on the third person pronoun 'they' as he said this signifies the importance of fostering autonomous learners who can reflect, reason, and empathise with others as they take in new information throughout their lives. Furthermore, Jeremy's (Initial Interview with Jeremy, 2022, lines 297-298) notion of "taking information from a range of places" promotes key skills in identifying and understanding bias when

sourcing trustworthy information, particularly as students transition to senior study and explore the way plagiarism can impact their work and future lives. Through the action of perspective-taking, a vital part of the critical reflection process (Southworth, 2022), students learn how perspectives offer insight into another's worldview and help position individuals when encountering new situations, people, and places. Similarly, perspective-taking helps students to articulate their personal values and develop an awareness of the values of others and how these inform our language and actions, as what we value forms our perspective (Rios et al., 2003).

For Violet (Initial Interview with Violet, 2022, line 376), using different perspectives, narratives, and voices in her Geography classroom encouraged learners to build a “fuller” and “wider picture” of the world. Violet's word choice here is pertinent as it captures the way she views her subject as a vehicle to expand students' horizons of the world both intellectually and geographically. To begin the journey into Stage 4 Geography, Violet performed an exercise with her new Year 7 geographers to represent this concept in a performative and creative way that was inspired by her understanding of the 4Cs capabilities. The activity, as explained by Violet (Initial Interview with Violet, 2022, lines 377-378), invited students to “put on [their] blinders” by physically cupping their hands around their eyes. Although Violet mentions that this exercise might seem a bit silly to the outside observer, I perceived it as a meaningful example of how teachers take complex and often inaccessible concepts and teach them in a way that is both creative, fun, and relevant for their students. Violet (Initial Interview with Violet, 2022, lines 381) remarks how she lead this exercise in a deliberately slow manner, “almost like a meditation”, so that her students could both visually and physically grapple with this concept. Violet (Initial Interview with Violet, 2022, lines 379-381) then posed and responded to a question that helped to frame the exercise, for example, ‘Geography, what is

Geography like? For me, I want geography for you to be opening up your, you know, your view of the world and widening your scope.” As she responded to the class, Violet (Initial Interview with Violet, 2022) slowly opened her hands wider and wider to expand her peripheral vision, to represent how learning in Geography expands our view of the world and “help us to think bigger” (line 385). Although this exercise was led by the teacher, by performing this exercise individually, each student could claim ownership over the process and see its relevance firsthand. Encapsulating the exercise in this bodily and performative way made it memorable and helped to demystify what the concept of ‘broadening one’s worldview’ meant for Violet’s learners. Pedagogically, this exercise supports students’ conceptual learning in a way that is more accessible for many learners. Emotionally, as Violet (Initial Interview with Violet, 2022, line 386) states, this exercise, and the role of engaging with perspective-taking imbues learners with “wisdom” and a “depth of character” that they can apply when listening to opposing viewpoints and encountering challenges both inside and outside of the classroom.

4.6 Curating Questions that Promote Critical Reflection

To practise critical reflection, both teachers and students must pose questions that spark critical thinking and drive student inquiry towards deeper learning. Whether these questions are prepared beforehand or arise organically in the moment matters, especially when uncovering who is predominantly doing the questioning, the teacher, or the student. When speaking with Dominique (Initial Interview with Dominique, 2022, lines 76-77) about how she practises critical reflection, she pondered whether she was “diving deep enough into a unit” and how she tended to ‘go deeper into her questioning’ when she had taught a unit before. The level of teacher confidence and expertise when approaching a new unit of work in any subject directly influences the opportunities for deep questioning, which for many teachers is already limited as they attempt to meet mounting syllabus requirements. When approaching something new or

challenging, Dominique (Initial Interview with Dominique, 2022, lines 472-473) spoke of the way she guided students by ‘talking out’ her thinking process with the class. Having their teacher’s thought process modelled to them aloud and openly is beneficial, because it paves the way for independent questioning from students and grows their confidence when sharing their thoughts. By showing students that teachers are also learners and occasionally need to approach teaching and learning as a collaborative venture rather than a solo enterprise, the student can begin to see merit in their own ideas. This also extends to the process of asking questions when engaging in new learning as a class. As the saying goes, there are no stupid questions in the classroom, as every question provides an opportunity for learning and reflection. In Dominique’s classroom, these modelling and questioning strategies were already built into her teaching practice and paved the way for critically reflecting learning to emerge. Although it is challenging, it is not impossible for teachers like Dominique to find time to teach and foster a culture of critical reflection in their classrooms.

Although Dominique admits that she wasn’t consciously teaching critical reflection in the previous unit studied by her current Year 8 English class, her questioning strategies align with various stages of questioning seen within the critical reflection Crucible. This was evident in Dominique’s (Initial Interview with Dominique, 2022, lines 260-272) description of the final stages of a novel study she taught using the text *Shooting Kabul* (Senzai, 2010), a story that focuses on an eleven-year-old boy and his family as they flee Afghanistan and build a new life in San Francisco. Dominique (Initial Interview with Dominique, 2022, lines 260-272) noted how students were very curious and intrigued by this novel because of the media coverage surrounding the Taliban’s education ban in 2021. Many students were keen to share their knowledge of the events in Afghanistan and began researching things that were banned by the Taliban during this time. As she finished the unit, Dominique (Initial Interview with

Dominique, 2022, line 219) reflected with her students by returning to their initial assumptions about the novel by asking them “How have your assumptions changed?” By posing this question, two things are evident. Firstly, students were invited to share their assumptions about the novel and its content at the start of the unit to ‘build the field’ (Derewianka & Jones, 2012, p. 45) and establish prior knowledge, thereby engaging with the first stage of the Crucible coherence maker. Secondly, when finishing the unit, students were invited to return to their initial assumptions and think deeply about whether these had changed because of their study, which links to the final re-solving stage of the Crucible. Despite this being taught implicitly, critical reflection was occurring during teaching and learning in this unit. There is an opportunity here for teachers to use their guiding questions for a unit of work as the impetus for critical reflection. The guiding questions that typically frame a unit of work are written to address the overarching themes, ideas, or content points the teacher wishes to explore in that unit (NESA, 2024b; Thoughtful Learning, 2024). These typically take the form of ‘*how?*’ ‘*what?*’ and/or ‘*why?*’ questions that can easily become touchstones that inform critical reflection throughout teaching and learning (Thoughtful Learning, 2024). For example, a question like “How do you contribute to being a global citizen?” (adopted from Dominique’s previous English unit on sustainability) (Initial Interview with Dominique, 2022, lines 182-183) can be used to foster critical reflection about the citizenship on a global scale and how issues of sustainability impact the way students live and navigate the world.

In her interview (Initial Interview with Violet, 2022), Violet shared two 4Cs processes that celebrated questioning and showcased how students can curate their own questions to support critical reflection. The first process titled, ‘question excavation’, explores the act of questioning ‘*why?*’ and drilling down into this form of questioning to invite students to challenge, explore,

and think deeply about their assumptions. As Violet (Initial Interview with Violet, 2022, lines 62-65) explains,

It's beginning with why? questions or it's like other, like once they've noticed an assumption or they've become alert to something in their world. It's then [questioning], why do people hold this? And, and I think that's really drilling into the why is a big part of that.

Violet acknowledges here that the critical reflection process begins with 'why?' questions, as these questions promote deep thinking and by extension, deep learning. When examining the stages of the Crucible, asking 'why this? why so?' is the second stage of the critical reflection process once an assumption has been unearthed and the learner is now thinking deeply about what it means, how they formed this assumption, and how it connects to the learning at hand (Jefferson & Anderson, 2017, p. 98). Posing 'how?' questions is also pertinent at this stage, as this forces the student to justify their reasoning and consider the veracity of their own or their peers' claims. 'How?' questions are instructive when exploring actions, emotions, and impacts, as they tap into the social and empathetic dimension of the critical reflection process. For example, students or teachers might pose the following questions:

- *How* do I / you know this?
- *How* did I / you become aware of this?
- *How* do I / you know this information is true / false?
- *How* might I / you / we change this?
- *How* do you think *x* feels?
- *How* does this change the way I / you / others feel about *x*?
- *How* does this impact me / us / others?

The question excavation process is described by Violet (Initial Interview with Violet, 2022, lines 66-72) in the following way:

I do like ‘question excavations’ [a 4Cs process] where like, kids stand into like a opposite apartment in the room and they look at an image and they ask a question, like a why? question- it has to be a why? question. And then they’ll go down on one knee for like, for a why? question. Basically, it embodies like digging deeper and deeper until they’re on their elbows. And they... the other person has asked deep enough questions to get them to that point. And then they kind of try to synthesise what is their, like their deepest, why? As a class, like coming to, like, what is the heart of these... of this issue or this assumption or this topic?

The collaborative nature of the question excavation activity necessitates that students work together to ask questions to get to this point. Violet (Initial Interview with Violet, 2022, lines 78-82) jokingly points out that even if students ask the obvious or most trivial question, it doesn’t matter, as the point of the activity is to celebrate questioning and encourage students to question rather than responding to the questions themselves. A similar activity that Violet (Initial Interview with Violet, 2022, line 81) recalled, involved students being given a word or an answer to something, and the students then generating questions that could create that answer. This process is called ‘what is the question?’ and provides a space where students can use their creativity to pose questions and build confidence while doing so (Initial Interview with Violet, 2022, line 81). Violet (Initial Interview with Violet, 2022, line 96) notes how the activity is purposeful in this way because there is a clear learning outcome; students know what they need to achieve, and they learn how to ask questions in the process. Furthermore, Violet (Initial Interview with Violet, 2022, lines 88-90) notes how the activity challenges students to embrace the complexity of knowledge that has more than one answer.

It challenges in terms of like ‘challenging assumptions’ and promoting critical reflection as learners. It challenges the notion that there’s one right answer. Because it flips it on its head and gives you the answer. And they can come up with multiple questions that target that answer. (Initial Interview with Violet, 2022, lines 88-90)

The ability to create multiple questions to suit a given answer involves deep thinking and challenges the traditional teaching model that favours and seeks answers rather than questions from students. In the 4Cs (Jefferson & Anderson, 2017, 2021a) classroom, to question is equally as important as to respond. Therefore, critical reflection and the questioning strategies that are tied to it help transform the way our students consider and act on the knowledge they encounter in the classroom.

4.7 Scaffolding Critical Reflection – How can this be done?

When teaching critical reflection, teachers must acknowledge and appreciate the student demographic they are working with, as these social-cultural, linguistic, historical, and economic factors shape the way students develop into critically reflective learners. At Moonstone HS, the level of socio-educational advantage is moderate. Approximately six percent of students identify as Aboriginal or Torres Strait Islander, whilst eight percent of students have a Language Background Other Than English [LBOTE]. Most students come from English speaking backgrounds. These statistics were at the forefront of Dominique’s mind when discussing how she could prepare her learners to critically reflect. Having taught at the school for almost a decade, Dominique (Initial Interview with Dominique, 2022, lines 304-308) felt that she understood the student demographic very well as she lived locally and had positive relationships with her students. However, Dominique (Initial Interview with

Dominique, 2022, lines 87-90, 100-102) noticed that her students needed time, guidance, and support to engage with the 4C capabilities independently.

The students at this school do need a lot of direction. They don't take risks, they can be quite nervous about sharing their ideas with others. I guess for me in my teaching practice, before I enter into a unit or a classroom, I think about the way that I learn best. And I sort of use those strategies with those kids... So, I guess I take that approach when I go into the classroom, in the sense that I give the kids that time. I don't put kids on spot. Maybe I give them a hint before in the lesson previous, so that those kids that were like me had that bit of time. (Initial Interview with Dominique, 2022, lines 87-90, 100-102)

To combat student anxiety, Dominique co-constructed knowledge with her students more frequently to model learning and support them to feel comfortable to share, express, and explore new ideas together. This relies on the teacher producing highly scaffolded teaching and learning experiences that guide students to a point where they can initiate questions, conversations, or small group discussions independently and feel confident when encountering with new ideas, thereby working within their ZPD (Shabani, 2010). Furthermore, this also encourages students to 'sit with the complexity' offered by a new learning experience and grapple with the uncertainty this may bring, especially when critically reflecting. For Dominique, regularly admitting to her students when she does not know the answer to a question forms part of her pedagogy, as it gives her the opportunity to investigate and learn alongside her students. When practising different 4Cs processes during staff development days, Dominique (Initial Interview with Dominique, 2022, lines 93-99) said that she would find it difficult to communicate her noticings to the group in the moment and required more time to "ponder" her thoughts and articulate her response. Dominique understood the value of taking

risks and engaging in the various 4Cs learning processes, but also sought to build a learning environment where her students felt comfortable doing so. Getting this balancing act right is at the heart of what effective teaching and learning looks like when using Jefferson and Anderson's (2017) 4Cs approach. Dominique's (Initial Interview with Dominique, 2022, lines 130-135, 148-150) explained her thought process further below:

So, for me, the first thing that I bring to that classroom is trying to make sure that it's an environment where those students feel comfortable, where they feel willing to and comfortable to take risks. Where I, where I'm approachable as a teacher and sort of being aware of the dynamics in the classroom and not to put kids on spot, cause I'm not gonna get the best answers out of them. Some of those kids work better in group work anyway... So, sort of being aware of my own bias or my own... what I come to with a text being aware that I'm an English teacher. So of course, Shakespeare is gonna be easier for me than it is for them.

As an English teacher, Dominique is conscious of the assumptions she brings to the classroom and how these shape her perceptions of each student's ability when approaching challenging texts like those composed by William Shakespeare. Arguably, the most complex part of the critical reflection process is when our assumptions are challenged and exposed to criticism. By exposing our assumptions, we too are exposed and made vulnerable to public scrutiny, which can be a personally confronting and emotionally charged experience. This is why students must learn how to contest, elaborate and/or adapt their assumptions within the safety of the classroom so that they can participate in such conversations and debates with guidance from their teacher and peers.

Violet noticed that even before her Year 8 Geography students were challenging their assumptions, the process of identifying assumptions was equally problematic, as many students found it difficult to voice their assumptions in a group setting (Initial Interview with Violet, 2022, lines 245-246). One strategy that Violet (Initial Interview with Violet, 2022, lines 113-126) employed to develop students' speaking, sharing, and deep listening skills was referred to as 'protected' thinking and talking time, where students are allocated a set amount of time to think and respond to a task verbally or through writing. Violet (Initial Interview with Violet, 2022, lines 113-126) explained the process in this way:

it's a process where it's creating structure around things like thinking or creating or writing. And the structures are really minor, but they're, they try to be positive. So, instead of saying, you know, just like, "don't talk multiple times" and say like, "think for yourself," you know, you kind of say, "look, we've got one song where you are gonna have time to yourself to write down as many things as you can." They know the song or the timeframe is loosely gonna be two and a half minutes or three minutes. So, it's not never ending, it feels achievable or attainable. It's slightly enjoyable and has enough disguise or, you know, that kind of thing to feel like, "all right, I can, I can engage here." And so, yeah, they'll like brainstorm as many things as they can in that two and a half minutes and then they know that there'll be some participation or sharing. So that's protected, like brainstorm. I suppose, protected talking time is when you put on a timer and you say, "all right, each person after they've done, figured out what they're gonna say will, has one and a half minutes that they have to fill up that entire time and no one else can speak, but there are follow up questions afterwards.

Creating structure around the process of thinking and writing helps mentally prepare students to complete the task and for the eventuality that they will have to participate in some way

(Initial Interview with Violet, 2022, lines 113-126). Although the time is limited, the expectation for how to use this time is made clear to students. Consequently, students feel valued and heard by their peers when they are given the floor to speak during this time (Initial Interview with Violet, 2022, lines 113-126). This process usually occurred when students worked in small groups, at which time Violet would facilitate the process by offering to model a response, prompt students through various gestures or questions, or model listening to a student's ideas in an engaged way. Violet (Initial Interview with Violet, 2022, lines 113-126) does this to generate momentum within each group's discussions but to also teach students to respect the process, especially for those who find it hard to fulfil the time limit or for those who exceed it altogether. When a group stays silent, Violet (Initial Interview with Violet, 2022, lines 171-172) acknowledges the power of their silence by stating, "that's completely fine. We're just gonna use up the space and take up the space." Silence is perceived as participatory because there is active thinking involved that is not disregarded as 'wasted time'. Once the activity is completed, Violet spends a few minutes reflecting with her students about how they felt they engaged with the process. Questions are posed to the class to prompt students to consider what they did well, what they found challenging, and how they approached the process as a group. Overall, participation in this type of process models speaking and listening skills that are at the heart of communication and collaboration, two of the 4C capabilities. Furthermore, as Violet (Initial Interview with Violet, 2022, line 179) highlighted, it creates a learning space where students can have "safe, but forced interaction" with their peers, particularly those who they may not sit or frequently interact with. Taking students out of their comfort zone and empowering them to participate in social interactions where they can learn to share perspectives, listen, and think deeply is part of how Violet models skills required to critically reflect.

Learning about critical reflection using the Crucible coherence maker can be a daunting experience for students, especially when hearing terms like ‘Crucible’, ‘assumptions’ and ‘critical reflection’ for the first time. Before students can deep dive into this capability, scaffolding needs to take place to define, conceptualise, and understand these terms and how they fit purposefully into the learning taking place. Violet (Initial Interview with Violet, 2022, lines 301-306) captures this feeling when explaining the strategies she uses to facilitate critical reflection with her Year 10 geographers:

I’ve noticed like the, the coherence makers can be a bit overwhelming... when presented to students with nothing before and kind of just saying, “oh gosh, what do you want? What do you want from me?” Kind of thing. Um, like what do you want from me in it’s?... it’s not clear, it’s not a line for me to write on. It’s, it’s a, a shape that I’m not familiar with. It’s a, some concepts that are challenging. So, I try to soften them a little bit beforehand.

The idea of “softening” the way each coherence maker is presented to students represents the scaffolding that takes place in Violet’s classroom to break down this process and the terminology surrounding it (Initial Interview with Violet, 2022, line 305). When viewing the documentary, *Go Back to Where You Came From* (O’Mahoney et al., 2011), Violet (Initial Interview with Violet, 2022, lines 281-284) noticed that her students were struggling to identify their assumptions about the individuals in the video, as she explained below:

I think sometimes with critical reflection, it’s hard to say, hard to notice your own assumptions when you’re in the thick of it. So, it’s easier to kind of like, be like, “that’s their assumption”, point to, point to something or hear it or notice it. And you kind of slowly then say, okay, “what are your assumptions? Or like, what assumptions do we hold?”

As students watched the video, Violet modelled how to recognise an assumption and used questioning strategies to work through the first few stages of the Crucible together with students. A printed copy of the Crucible was provided to students during this activity so that when they heard an assumption being made in the video, they could annotate it using their Crucible handout (Initial Interview with Violet, 2022, line 293). The assumption is then written inside the Crucible on the handout so that it can be ‘tested’ (evaluated further) when students progress to the questioning stage of the process, where they ask themselves, ‘*why this? why so?*’ (Initial Interview with Violet, 2022, line 291). This is completed collaboratively so that students call out when they hear an assumption and when they receive more information that reveals why that assumption was made. Violet prompts students to understand why these assumptions are formed by exploring what experience or information everyone has been exposed to and considering whether they are open or close-minded about the issue (Initial Interview with Violet, 2022, lines 292-293). Once students warm to this process, Violet then re-frames the question so they can now consider their own assumptions towards the people in the video, thereby re-shifting their frame of reference to answer this question (Initial Interview with Violet, 2022, lines 295-296). Therefore, students don’t have to claim the assumptions of others as their own, as simply beginning to recognise and attribute the assumption to the person who holds it is enough to ease them into the first stage of the critical reflection process.

4.8 Pondering how Poetry can be used to Critically Reflect

Before each teacher experimented with poetry as a tool for critical reflection in this study, they were first asked to consider how poetry could be used to facilitate reflection. Dominique remarked how poetry and the process of understanding poetry isn’t always straightforward, especially when students first read a poem and cannot grasp its meaning. As all English teachers discern, it takes time, practise, and patience to unravel the hidden meanings within a poem and

partake in its beauty and complexity. Dominique (Initial Interview with Dominique, 2022, line 474) likened the apparent complexity of learning through and about poems to a puzzle. Although the student might not initially understand it when they begin, “the fun is trying to break it apart” (Initial Interview with Dominique, 2022, line 474). Breaking apart and piecing together this puzzle with fresh perspective and new meaning necessitates that the learner is an active participant in the meaning-making process. This is comparable to the way the learner is invited to re-solve and bring together renewed understanding and action during critical reflection. Poetry is powerful but it is also highly empathetic in the way it offers such renewed understanding, which pairs it perfectly with critical reflection. This is captured in another quote by Dominique (Initial Interview with Dominique, 2022, lines 482-483, 485-489) below:

I think it’s a way to, to empathise with the situation they haven’t been in before... To think about, to think about maybe a mundane situation in new way. So, sort of building those new ideas about things. It may just be something as simple as a summer’s day or falling in love for the first time. I guess talking to students about, if you were this person, how would you feel, but also how has this changed your understanding of something that’s pretty every day?

The questions posed by Dominique demonstrate how poems can facilitate perspective-taking amongst students. Poems are dynamic in this way because they can offer learners insight into a different perspective not only through writing but through performance and song, which contributes to the creative and multimodal potential that poems hold to facilitate critical reflection. When considering how poetry builds new ideas, this directly corresponds to the cognitive domain of the LDW, where students explore new possibilities and perspectives (Jefferson & Anderson, 2017). Since poetry offers a gateway into the human experience, poetry can be used as a resource to provoke reflection and knowledge creation during critical reflection.

Whilst curating poetry to provoke curiosity, reflection, and deep thinking amongst our students is transformative, the act of creating poetry similarly has the potential to support and deepen the critical reflection process. When considering the poetry our students compose in English, the thought, skill, and time involved in this process is transferable. Poetry is often seen exclusively as something that is studied in the English classroom, rather than something that can be studied or created across subject areas for various learning purposes. Since the process of composing poetry is a highly personal, reflective, and creative endeavour, it can be used by students to communicate their ideas, questions, and assumptions during critical reflection. When beginning this study, Violet (Initial Interview with Violet, 2022, line 345) saw the opportunity to experiment with poetry to critically reflect as an “exciting challenge”, as her love for poetry spurred her to find different ways to connect it to critical reflection. In previous years, Violet had only ever used blackout poetry in her teaching as a fun and accessible way to make and create meaning with her Geography students. To create a blackout poem, the student is given a text to read (often multiple times) and ‘black out’ the words they wish to remove using a black marker, leaving only selected words or phrases behind. The words and phrases that are left behind form the basis of the new text (the poem) which is often accompanied by illustrations that are linked to the message of the poem and are created using the text that has been erased. Violet (Initial Interview with Violet, 2022, lines 352-360) communicates her thoughts about the value that can be garnered through the creation of blackout poetry in the HSIE classroom to critically reflect below.

I’ve used that in the past and that’s always excited me as a way to help students to not only read and think, but then to create quite seamlessly and in a way that feels accessible. And then students share that poetry with each other. And again, it’s, it’s almost like they feel safe. I’ve seen students feel quite safe in that process because its words written by someone else, but it’s curated by them. So, it feels like I can read this out. It’s almost like reading a sentence

out to the class rather than sharing my heart and soul, and yet beautiful pieces come from it. And so, I think that blackout poetry has been a great way to convey understanding and to the students to create and make their own meaning from, yeah, from work. (Initial Interview with Violet, 2022, lines 352-360)

To know that students can find safety and experience vulnerability through the creation of blackout poetry makes it a positive and versatile tool to help them communicate their assumptions and digest new perspectives they may not wish to initially voice aloud. For students who may not wish to share their blackout poetry, the evidence that they have engaged with the critical reflection process is still evident through their composition, which makes it accessible to all learner types. Critical reflection requires students to see and hear things differently, to provoke thinking and emotion in the same way that poetry can. Offering poetry as a tool for exploring diverse perspectives, voices, and narratives whilst also considering how these perspectives change a student's understanding through the creation of their own poetry can promote critically reflective learning in the Stage 4 classroom.

4.9 Chapter Conclusion

Chapter Four has summarised the main findings from Phase One of the study and discussed the overarching themes that emerged during data analysis. The initial interviews with teachers in Phase One began the study with an opportunity for discussion about what critical reflection is and how teachers imagined it in practice using a 4Cs approach at Moonstone HS. Chapter Five will present the findings from Phase Two, which focus on the fieldwork component of the study and the lesson observations that took place in the Year 8 English and Geography classes.

Chapter Five: Phase Two Findings

5.1 Chapter Introduction

This chapter begins with a found poem titled *Tourism kills tourism* that I composed using observational data (dialogue quotes) taken from a key learning sequence in the Year 8 Geography class. This poem evokes the emotionality and cognitive processes entangled in this learning sequence by capturing the interactions between teachers and students as they critically reflected. The found poem is explained in the next section of the chapter to make transparent the poetic and phenomenological process I undertook when composing it. Phase Two of the study is concerned with the fieldwork conducted at Moonstone HS and discusses the findings that emerged from the observations of the teachers and students in the Year 8 English and Geography classes, as well as the artifacts collected that evidence student learning. An overview of the main findings from this phase of the study is presented to readers and accompanied by snippets from key data collection and analysis documents. The resulting seven superordinate themes that emerged from data analysis are then discussed and appraised using observational data and artifacts (student work samples).

Tourism kills tourism

“Um, where are we again?”

tourists floating in a polluted sea
a cruise ship, lots of plastic rubbish, an approaching city
is presented as a single colourised cartoon on the electronic whiteboard
for contemplation, for

d

e

e

p

noticing...

instrumental music is turned on
it starts slow and soft, almost peaceful
and then it quickens in pace
dubbing the cartoon with its urgency
matching its intensity
the tension rises
and the music becomes louder and faster

and faster,

and faster,

and faster,

until eyes w-i-d-e-n and minds op_en to its power

“*Challenge yourself to keep going for another 30 seconds,*” calls Violet to the class

26, 27, 28, 29, 30.

Time is up!

The music ceases.

...

Students form a circle in the classroom to share their ideas.
One thought or phrase is spoken into the centre of the room.

No hands are used to signal who goes first.

They must queue themselves in

and ‘throw’ their ideas

into the void

...

students are now | speaking into the void |

.

.

.

.

“The music sounds like death – people are dying”

“it’s a drawing”

“the sky looks polluted”

“they’re dying”

“it looks polluted”

“they don’t know where they are”

“over polluted”

.

.

.

“Hold the process!” appeals Violet in attempt to stop students
speaking over each other

They must be patient and observant when sharing.

.

.

“Voices that haven’t spoken into the void” are now encouraged to share
and this continues for a few more minutes.

I notice that students are good at this.

...

A question is posed:

T: *Is it possible for people and places to coexist?*

Students now enter the problem-solving space – together.

S1: If people weren't here the world would be overgrown and in disaster.

S2: [They] said it doesn't work but people who aren't environmental would ruin it!

T: *Do you want to **challenge** [that] or add to it?*

S2: The world would continue to survive on its own.

S3: I think people to die.

T: *Give [them] space to justify*

S3: Less animal suffering, etc.

End of process.

To begin this chapter, I have chosen to capture a selected learning sequence from one of Violet's Year 8 Geography lessons using a found poem to highlight the collective experience between teacher and students in this moment. This lesson was focused on introducing and understanding the harmful impacts of tourism on places. The learning sequence was featured in the beginning of the lesson where students were provided with a stimulus to view and ponder silently through a 'deep noticing activity'. This then led into a whole-class discussion that was coordinated by students and their teacher using a 4Cs process called 'speaking into the void'. As students silently viewed the stimulus, Violet played an instrumental piece that began slow and soft, and gradually rose in volume, tension, and pace to reach a crescendo, to reflect the tone of the stimulus presented on the electronic whiteboard. This found poem aims to specifically address my first research sub-question which seeks to uncover the experiences of students and teachers involved in critically reflective teaching and learning in the Stage 4 classroom. Observing this learning sequence in practice was powerful and illustrative of the critical thinking that students engage in at the start of the critical reflection process.

As a phenomenological researcher, I maintained a reflexive awareness of how my poetic voice and expertise as an English teacher shaped my composition of this found poem. Unlike the found poem that begins Chapter Four, this poem does not rely wholly on verbatim interview transcripts and afforded me more creative freedom to insert my own voice as a participant-observer into this phase of the study (Creswell, 2012, p. 213). I employed my fieldnotes to help narrate the teaching and learning occurring in this moment and recreate the emotional atmosphere I experienced during this lesson observation (Butler-Kisber, 2002). This is reflected through my arrangement of the words and phrases on the page, as well as the addition of punctuation, emphasis (boldface and italics), line breaks, spacing, and dialogue. Using poetry to evoke the emotionality of this learning experience brings readers closer to the 4Cs

processes being explored through the data (Leavy, 2014, p. 79). Teacher and student voices were featured prominently in this poem to highlight their experiences through the addition of dialogue from the verbatim transcript that was included in my field diary (Butler-Kisber, 2002; Neilsen, 2004). This poem celebrates student voice by capturing the 4Cs process ‘speaking into the void’, where students must coordinate their own discussion through careful observation, turn-taking, and deep listening that is performed standing in the middle of the classroom. The poem also serves as a point of contemplation and provocation for how critically reflective learning can begin through a simple yet powerful learning sequence. Capturing this moment poetically simultaneously pays homage to the creativity of the 4Cs processes that are used by Violet here.

Phase Two of the study began with a Zoom planning session between myself and the teacher participants to build their capacity surrounding critical reflection. During this session, teachers engaged with seminal theory relating to critical reflection and the 4Cs approach, as well as reflection activities designed to help them consider where they could embed opportunities for critically reflective learning in the units they taught to their Year 8 classes. The end of the planning session featured dedicated time for teachers to work on their units and seek feedback on their ideas from the group. This planning session took place after the initial interviews were conducted with teachers to ensure their assumptions about critical reflection were not influenced by my own understandings as a teacher-researcher.

A key strategy that was introduced to teachers during this planning session was the idea of a provocation, which is explored further in this chapter. Originally derived from a Reggio Emilia approach, a provocation is a type of stimulus that provokes a response from the learner (Haughey & Hill, 2017). Provocations are used by teachers to challenge and extend students’

ability to think critically and creatively about their world, which can promote critical reflection. Provocations can therefore support students to explore diverse and challenging perspectives across content and texts to nurture their critical consciousness by asking ‘*why?*’ questions. Examples of provocations were shown to the group during the planning session to exemplify this strategy and encourage teachers to use it in their English and Geography units. My own teaching experience using provocations in the classroom and shaped my understanding of their power and transformative potential when teaching critical reflection.

Observations were carried out at Moonstone High School across two Year 8 classes: Jeremy, Dominique, and Marcus’ Year 8 English class and Violet’s Year 8 Geography class. A combination of handwritten fieldnotes and impromptu interviews with students during lessons accounted for much of the written data that was collected. Student work that was produced by Year 8 across these classes was also collected and documented as part of the data set. The field notes and interview data that was collected were analysed using IPA.

The emergent themes that resulted from data analysis during this phase of the study were grouped under two categories to reflect the two Year 8 classes under exploration. These themes emerged from an IPA analysis of the handwritten field notes, printed observation protocols, and verbatim interview transcripts. A deliberate choice was made to group the observational data and the student interviews according to the Year 8 class, as this helped to contextualise the student interviews according to what was occurring in the lesson. Although this deviated from how IPA is traditionally conducted, Smith et al. (2009) note that the IPA researcher has the capacity to be creative in their data representation whilst still adhering to the tenets of an IPA approach. The emergent themes that resulted from analysis were then categorised into subordinate theme clusters (see Figure 5.1), allocated new theme titles, and tabulated in Master

table B (see Figure 5.2) where they were colour coded according to similarity across the two Year 8 classes. At least two examples from either the field notes or interview data were included to evidence these final seven superordinate themes.

Figure 5.1

The process of identifying emergent theme clusters from the field and interview data

<p>Forming clusters through matching like themes</p> <ol style="list-style-type: none"> 1. A willingness to experiment with the crucible 2. A sense of openness and playfulness within a lesson 3. Warm-in activities used to develop LDW competencies 4. Multiple readings of a stimulus to promote deep reflection 5. Use of provocations to question content from multiple perspectives 6. Critical questioning used to promote reflection and elicit students' opinions 7. Timing activities for deep reflection 8. Thinking about perspective 9. Plenty of scaffolding applied to writing tasks 10. Multimodal provocations paired with deep noticing 11. 'Holding the process': practising 4Cs processes to foster critical reflection 12. Entering the problem-solving space 13. Throwing ideas 'into the void' 14. Modelling how to challenge assumptions 15. Linking back to the purpose of the crucible in a lesson 16. Challenging students to go further and engage in a 4Cs process 17. Collaborative activities build focus, teamwork and support student learning 18. Linking back to the 4Cs process through reflection 19. Emphasis on the 4Cs process and its execution during a lesson 20. Inherent creativity reflected in student work 21. A focus on developing a balanced and informed view 22. Explicit teaching using the crucible 23. Shifting perspectives 24. The crucible as a way to scaffold complex thinking 25. Students personalising the crucible 26. Having different opinions and valuing our differences 27. Valuing all student voices 28. Multimodal provocations 29. Teachers need to be careful observers and listeners during 4Cs activities 30. Big, open-ended questions used to frame critical thinking <p>Superordinate theme clusters for Year 8 Geography</p> <p>Explicit teaching using the crucible</p> <ul style="list-style-type: none"> • A willingness to experiment with the crucible • Linking back to the purpose of the crucible in a lesson • The crucible as a way to scaffold complex thinking • Students personalising the crucible 	<ul style="list-style-type: none"> • Multiple readings of a stimulus to promote deep reflection • Use of provocations to question content from multiple perspectives • Multimodal provocations paired with deep noticing • Multimodal provocations <p>'Holding the process': practising 4Cs processes to foster critical reflection</p> <ul style="list-style-type: none"> • Warm-in activities used to develop LDW competencies • Throwing ideas 'into the void' • Challenging students to go further and engage in a 4Cs process • Collaborative activities build focus, teamwork and support student learning • Linking back to the 4Cs process through reflection • Emphasis on the 4Cs process and its execution during a lesson • Teachers need to be careful observers and listeners during 4Cs activities <p>Practising critical thinking</p> <ul style="list-style-type: none"> • Critical questioning used to promote reflection and elicit students' opinions • Big, open-ended questions used to frame critical thinking <p>Guiding learners towards critical reflection</p> <ul style="list-style-type: none"> • Timing activities for deep reflection • Plenty of scaffolding applied to writing tasks • Modelling how to challenge assumptions <p>Entering the problem-solving space</p> <ul style="list-style-type: none"> • Thinking about perspective • A focus on developing a balanced and informed view • Shifting perspectives • Having different opinions and valuing our differences • Valuing all student voices <p>Year 8 English- Dominique, Jeremy and Marcus</p> <ul style="list-style-type: none"> • Open-ended critical questioning
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Figure 5.2

A section of Master Table B evidencing the seven superordinate themes found in Phase Two

Master Table B: Observation Notes and Classroom Interviews (Phase 2)				
Superordinate Themes	Year 8 Geography (Violet's class)		Year 8 English (Jeremy, Dominique, and Marcus' class)	
	Quotes from interview transcripts or observation notes	Page line/no.	Quotes from interview transcripts or observation notes	Page line/no.
Moving from critical thinking to critical reflection	"Does technology connect us or separate us?" (spoken by the teacher)	3	The lesson where students crafted collaborative PEEL paragraphs helped develop their conceptual skills, to prime them for critical reflection.	8
	"Is it possible for people and places to coexist?" (spoken by the teacher)	6		
	"If people weren't here the world would be overgrown and in disaster" (student response)	6		
Guiding learners towards critical reflection	The teacher unpacks the image (image + caption regarding pollution) to guide the class discussion to lead into a bigger conceptual focus using the Q: "Is it possible for people and places to co-exist?"	6	Conversations about connotative and denotative meanings with students in this class led to student's discussing the line about acid seas in the poem.	
			Read-aloud of the poem, The Man from Snowy River to the class. Marcus did a think-aloud of key ideas from the poem with the class to aid conceptual thinking.	
Teaching using multimodal provocations	Image presented on screen with the caption "um, where are we again?" The image is depicting people in the sea surrounded by plastic and rubbish, a cruise ship floats nearby. Music is added (soft and slow to start and then reaches a crescendo)	6	The read-aloud of the poem, The Man from Snowy River acted as a provocation for conceptual thinking about gender, bravery and courage.	

Note. This figure only shows a section of Master Table B, which details the first three superordinate themes that were found in Phase Two of the study. Seven superordinate themes were found and represented in Master Table B, which can be found in Appendix F.

The seven superordinate themes that were found in Phase Two of the study, as featured in Master Table B, are listed below:

1. Moving from critical thinking to critical reflection
2. Guiding learners towards critical reflection
3. Teaching using multimodal provocations
4. ‘Holding the process’: Practising 4Cs processes to foster critical reflection
5. The Crucible as a teaching and learning tool
6. Creativity and critical reflection
7. Exploring diverse perspectives

5.3 Moving from Critical Thinking to Critical Reflection

Critical thinking is an important steppingstone towards critical reflection. Across both classes, open ended questioning, and the use of ‘*why?*’ questions helped to frame critical thinking and pave the way for critical reflection. The use of broad open-ended questions was a feature of Violet’s lessons, particularly to begin the lesson and set the learning intentions. These questions were used to frame Violet’s Geography lessons and motivate students to think deeply about their topic of study. In Year 8 English, Marcus, Jeremy, and Dominique used conceptual questioning to promote deep and critical thinking when reading poetry texts with their class. This encouraged critical questioning from students when participating in English textual analysis and collaborative writing activities.

Geography is a subject where students are invited to consider big picture questions about their world as they learn about their role as global citizens. In her Year 8 Geography class, Violet focused her lessons on the concepts of tourism and ecotourism, exploring and the impact of tourism around the world, particularly in popular Australian tourist destinations like Bali. When my observations of Violet's lessons began, she was teaching students about the impact of technology. To begin one lesson, Violet used an overarching question to drive student inquiry into this concept, thereby highlighted how such open-ended questioning strategies can stimulate critical thinking from Stage 4 students (Observation notes for Violet's lesson on the 9th of June, 2022). Violet began the lesson with the question: "Does technology connect us or separate us?" (Observation notes for Violet's lesson on the 9th of June, 2022). This question formed part of an opening statement activity where students were instructed to stand in a horseshoe configuration in the middle of the classroom. The aim of this activity was to encourage students to take and defend their stance on the above question, thereby challenging them to voice an assumption and justify it verbally in front of the group. To form the horseshoe, students had to choose the side they were on, which reflected their response to the question. The options were: agree, strongly agree, disagree, and strongly disagree. As students took their places, Violet enforced a strict 'no fence sitters' rule to discourage anyone from adopting a neutral stance.

Participating in this activity strengthened students' communication and verbal justification skills, as they were prompted by Violet and the group to expand and justify their stance. Significantly, as students voiced and defended their opinions about technology, they were unknowingly identifying their assumptions and practising the first step of the Crucible. For example, some students voiced that technology made them feel disconnected from the world, whilst others felt that it helped bring people together. The probing questions that Violet posed

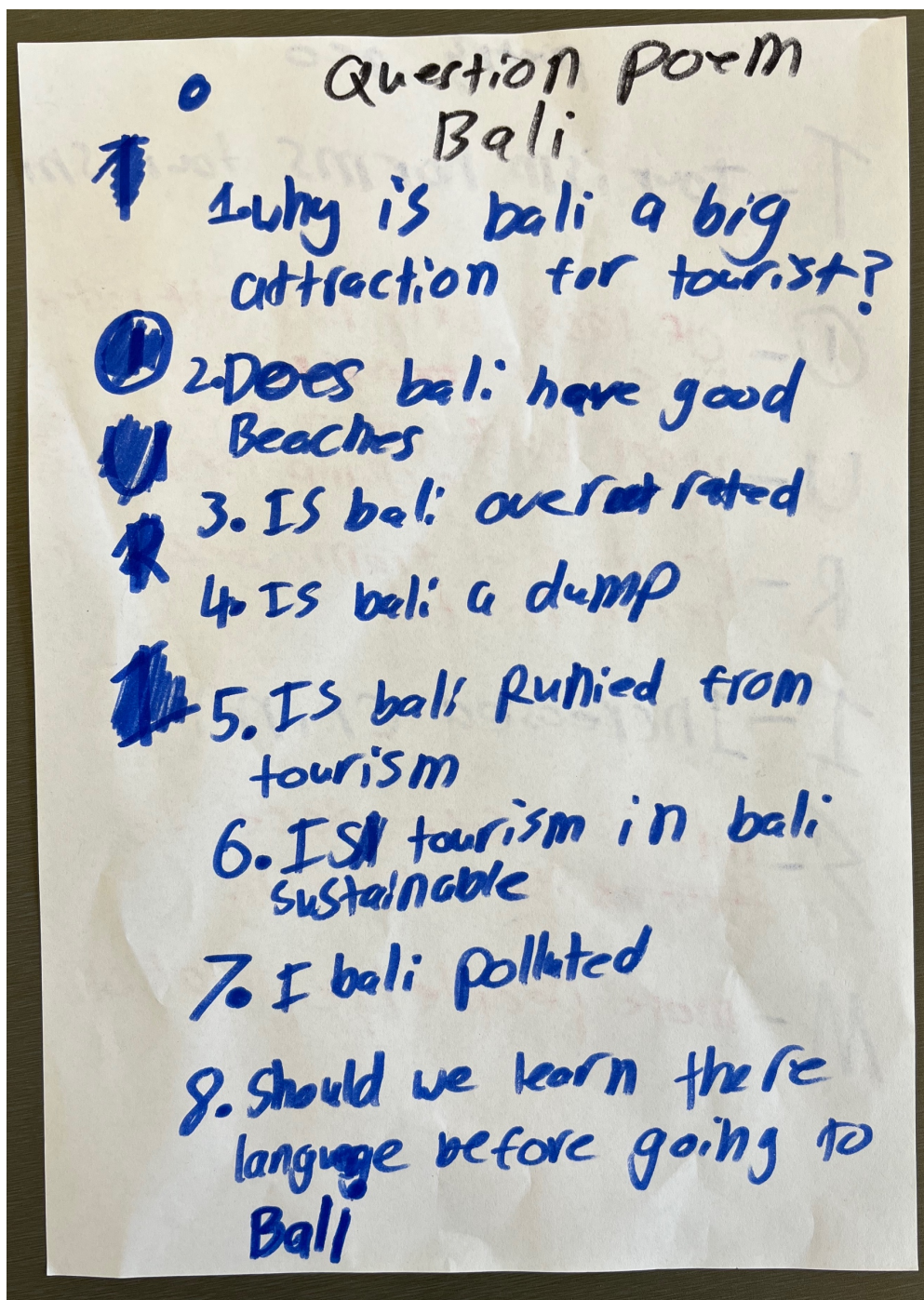
during this activity helped to draw out students who were reluctant to voice their thoughts, such as, “why do you stand where you stand?” “Can you expand on what you have said?” (Observation notes for Violet’s lesson on the 9th of June, 2022). Violet challenged her students to go beyond the simple yes/no response and practise extended talk that helped them to reflect deeply on their stance in this moment. Although students performed this activity routinely, some students needed reassurance and occasional prompting to sustain and deepen the conversation. It is at this stage of the activity where critical thinking is likely to occur if the right questions are posed. Violet continued to probe students using ‘*why?*’ and ‘*how?*’ questions to invite students to think deeply and tap into their emotional response to the question (Observation notes for Violet’s lesson on the 9th of June, 2022). This was further supported through the assistance of an SLSO whose participation and counter-perspective offered a unique point of contemplation which facilitated this process. Notably, this activity revealed the importance of building a strong group dynamic in the classroom where critical conversations can occur routinely and can be sustained to promote critical thinking.

An intriguing work sample that resulted from Violet’s ‘Interconnections’ unit was captured in the form of a question poem composed by one of her Year 8 students (see Figure 5.3). This *Bali* question poem was an opportunity for the student to communicate their understanding about the concept of ecotourism in Bali to consolidate their study. This included the impacts of tourism and the notion of how a person can be a ‘good tourist’ when travelling abroad. This poem was chosen as it represented how the collective power of poetry and critical questioning can be harnessed through this poetic form to stimulate deep learning about a topic. Prior to this, Violet attended a post-lesson reflection session with me to debrief and seek strategies for her forthcoming Geography classes. The topic of question poetry was explored, and Violet took a keen interest in using poetry as a pedagogic tool with her students. The decision to compose a

question poem was shaped by this moment and became a creative endeavour between teacher and student during this lesson. Despite never engaging with this style of poetry before, Violet saw that her student was struggling to compose a poem and suggested they craft one together.

Figure 5.3

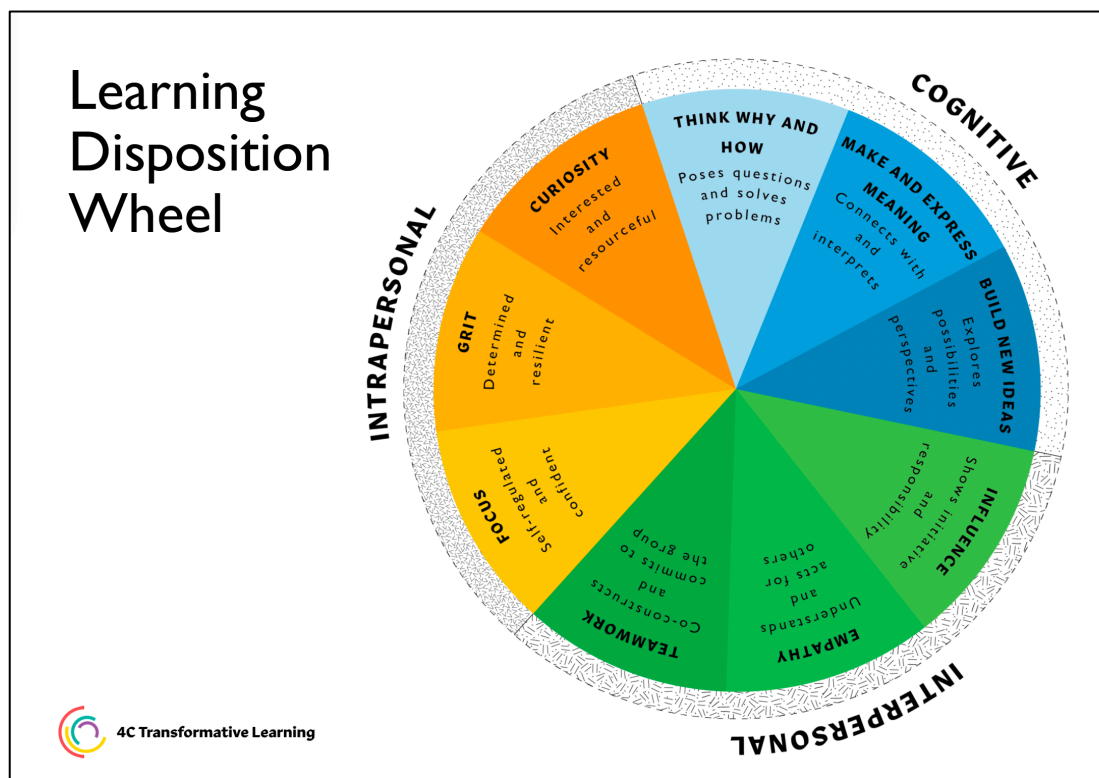
The Bali question poem composed by a Year 8 Geography student



To reflect on this work sample and the way it demonstrates critical reflective learning in a 4Cs approach (Jefferson & Anderson, 2017, 2021a), I will frame my discussion using the competencies within the LDW (see Figure 5.4). By choosing to take a risk and try something new, both Violet and her student displayed ‘teamwork’ and an openness to the possibility offered by question poetry, thereby connecting with the competency ‘build new ideas’ (Jefferson & Anderson, 2021d, p. 76). This is similarly evidenced by the fact that knowledge was co-constructed and scaffolded through teacher support which helped to motivate a disengaged student in this moment. Violet recalled in her final interview that when she observed that this student was struggling to engage in the activity, she believed that creating a question poem could offer a more interesting avenue for them to reflect on their understanding of ecotourism in Bali. By posing ‘*is*’ ‘*why*’ and ‘*does*’ questions, the student produced a work sample that demonstrates their ability ‘think why and how’, which is a vital pillar of critically reflective learning (Jefferson & Anderson, 2021d, p. 76).

Figure 5.4

The Learning Disposition Wheel (LDW)



Note. Reprinted from Jefferson, M., & Anderson, M. (2021d). *Transforming education: Reimagining learning, pedagogy and curriculum* (p. 76). Bloomsbury Publishing Plc. Copyright 2021 Transformative Learning. Reprinted with permission.

The power of using question poetry is derived from the fact that students can take control of the questioning and deepen their ability to critically question about a topic. For a Year 8 learner, the process of writing a question poem invites contemplation and offers intellectual challenge yet is not prescriptive in the type of questions asked, nor whether these questions need to be answered. A question poem may feature a combination of rhetorical questions, questions that are answered or expanded upon, or a combination of the two, which renders it a thoughtful and versatile poetic form to use with Year 8 learners to foster critical reflection. Notably, the act of posing questions serves more value when experimenting with question poetry than forming a response to those questions. In this case, the *Bali* question poem offered the student a chance to demonstrate and deepen their learning in the unit so far, making it a valuable, dynamic, and thoughtful formative tool for critical reflective learning.

Questioning strategies were combined with conceptual thinking in Year 8 English to promote critical thinking amongst students. Despite this being a ‘top’ English class, Dominique and Jeremy aimed to strengthen students’ conceptual thinking skills, as they felt that students needed more exposure to conceptual thinking and writing in English; something they believed was stifled during the period of remote learning in 2021. When observations of this class began, Marcus informed me that each term, cohorts across Years 7 to 12 would focus on developing competencies from the LDW to strengthen their participation in 4Cs learning and equip them to engage with each of the four ‘C’ capabilities (Jefferson & Anderson, 2017, 2021a). In Term 2 of 2022, the competency being targeted for this Year 8 cohort was grit, and how grit can be practised and reflected in the teaching and learning occurring in their subject classrooms. Work

samples from 8 roll call classes have been included here to demonstrate student learning about this competency (see Figures 5.5 & 5.6).

Figure 5.5

A student poster made by Year 8 roll call students about the competency 'grit'

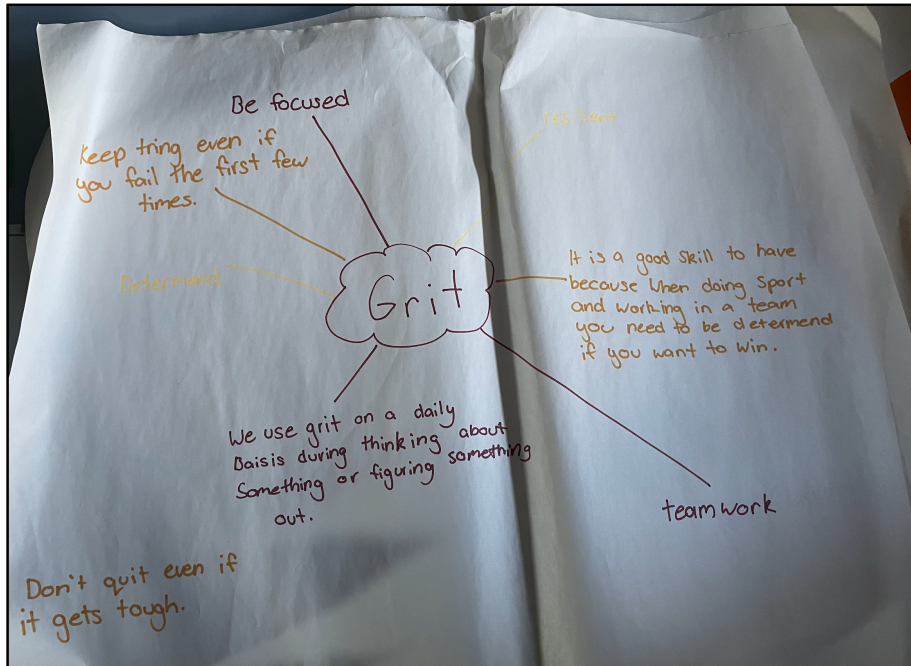
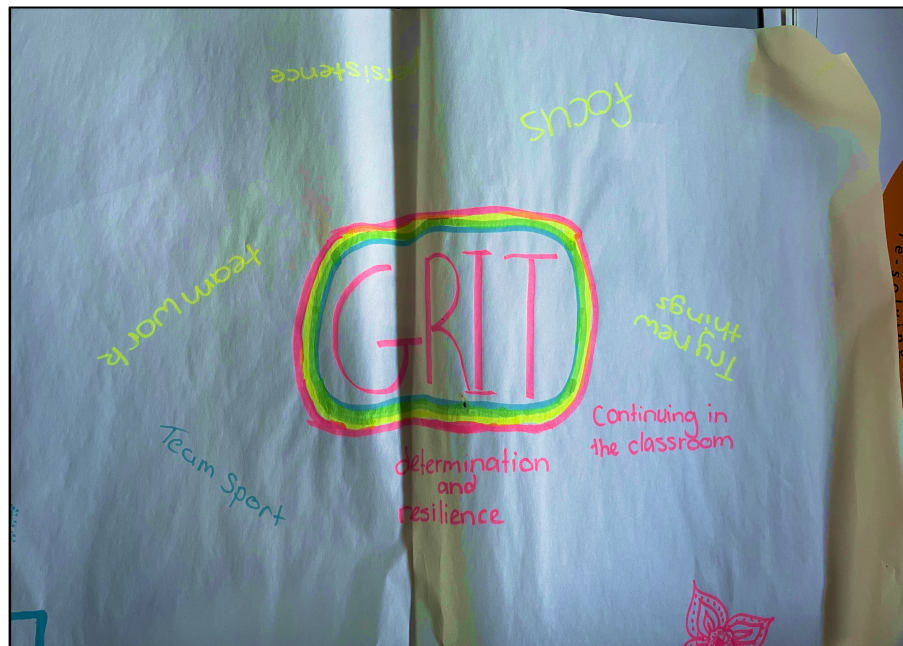


Figure 5.6

A student poster made by Year 8 roll call students about the competency 'grit'



The lesson I have chosen to highlight in this discussion is part of a series of lessons that focused on an English textual study of Banjo Paterson's (2008/1890) poem, *The Man from Snowy River*. The overarching focus for this Year 8 poetry unit of study was conceptions of Australian identity including bravery, determination, and courage, which are reflected in Paterson's (2008/1890) poem. In previous lessons, the poem was read aloud to students and decoding activities were performed in small groups to understand the poem's language and main ideas. In this lesson, Marcus challenged students to consider the following conceptual question: How does this poem show what we value in the Australian identity? An important aim that Marcus and Dominique shared for this lesson was introducing students to various concepts explored by the poem, including the notion of 'the underdog', grit, courage, determination, and bravery. The challenge here lies in the abstract nouns that students must understand and engage with to participate in conceptual thinking about the poem. To help students demonstrate grit, the main group activity placed students into randomly chosen groups to co-construct a PEEL⁴ paragraph sentence by sentence to the question posed by Marcus on the whiteboard. Students were strategically separated from their friendship groups to complete this writing activity to build their collaboration skills.

The resulting work samples (see Figures 5.7-5.9) produced by groups shows an engagement and consideration of how the main character embodied various notions of the Australian identity, including grit. The conceptual thinking that was sparked by students' reflection and written responses to this question demonstrates critical thinking as students were required to:

⁴ The acronym PEEL stands for 'Point, Evidence, Explain, Link' and is a commonly used when structuring writing that is coherent, clear, and focused across any subject area. The two Es in the PEEL acronym are used interchangeably and typically provide a scaffold for explanatory writing for English students.

- develop a deep understanding of the text, its context, and purpose
- reflect on the writer's perspective about what is valued in the Australian identity
- discuss interpretations of what is valued by the writer and how this is demonstrated in the poem
- form an argument that links their chosen idea/s to the question
- justify their judgements using textual evidence from the poem
- collaborate to form each part of the PEEL response
- collaborate to form a grammatically and syntactically accurate paragraph response
- share their responses with the teacher for feedback and revision

Figure 5.7

'PEEL' paragraph responses from a group in the Year 8 English class

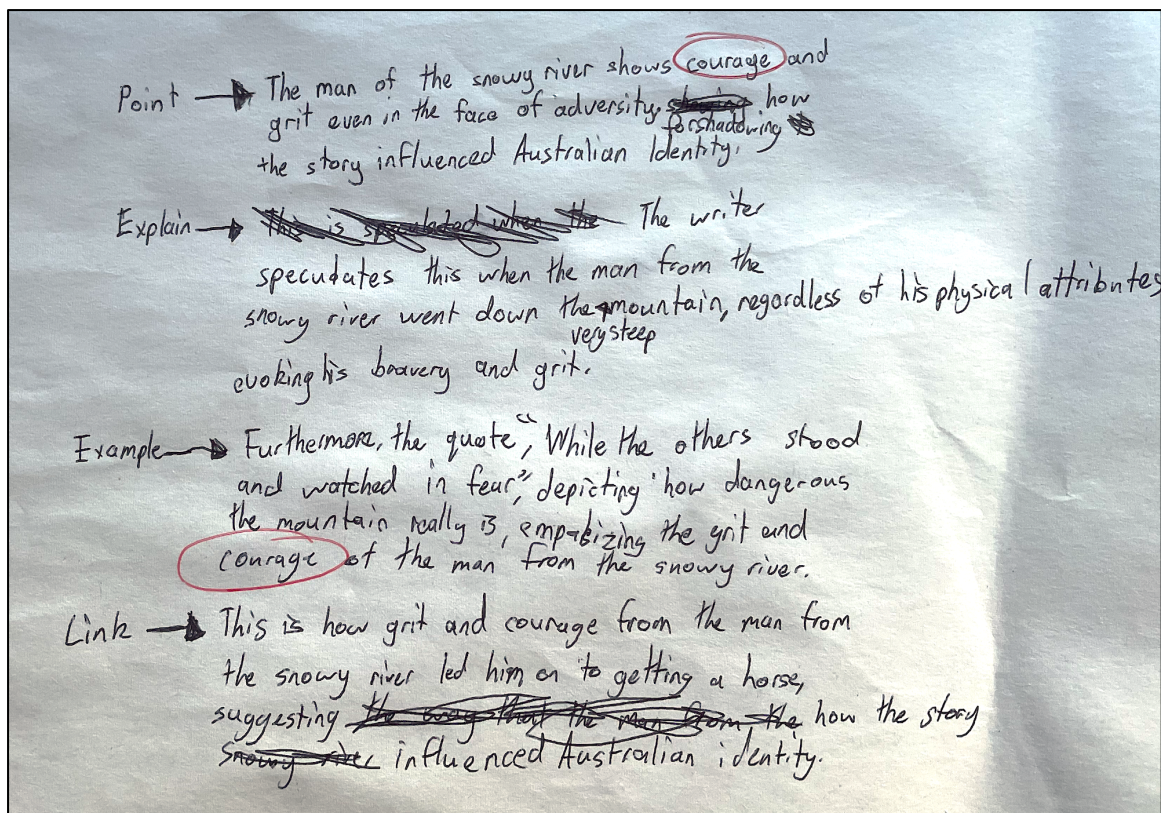


Figure 5.8

'PEEL' paragraph responses from a group in the Year 8 English class

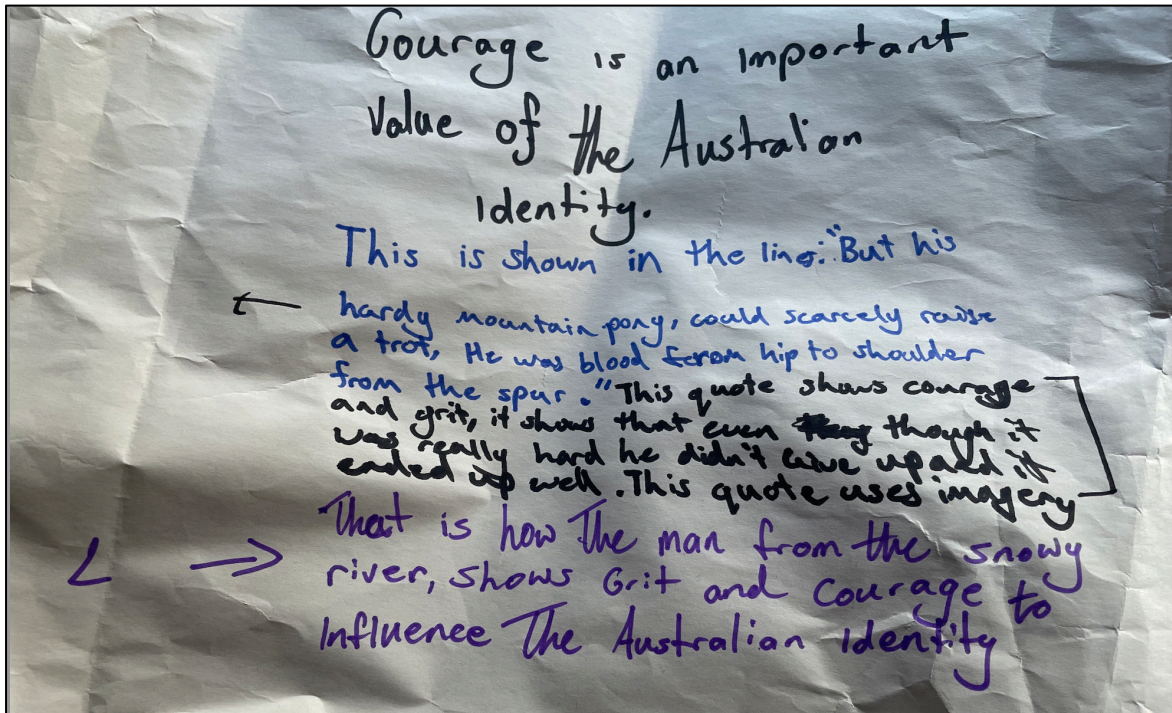
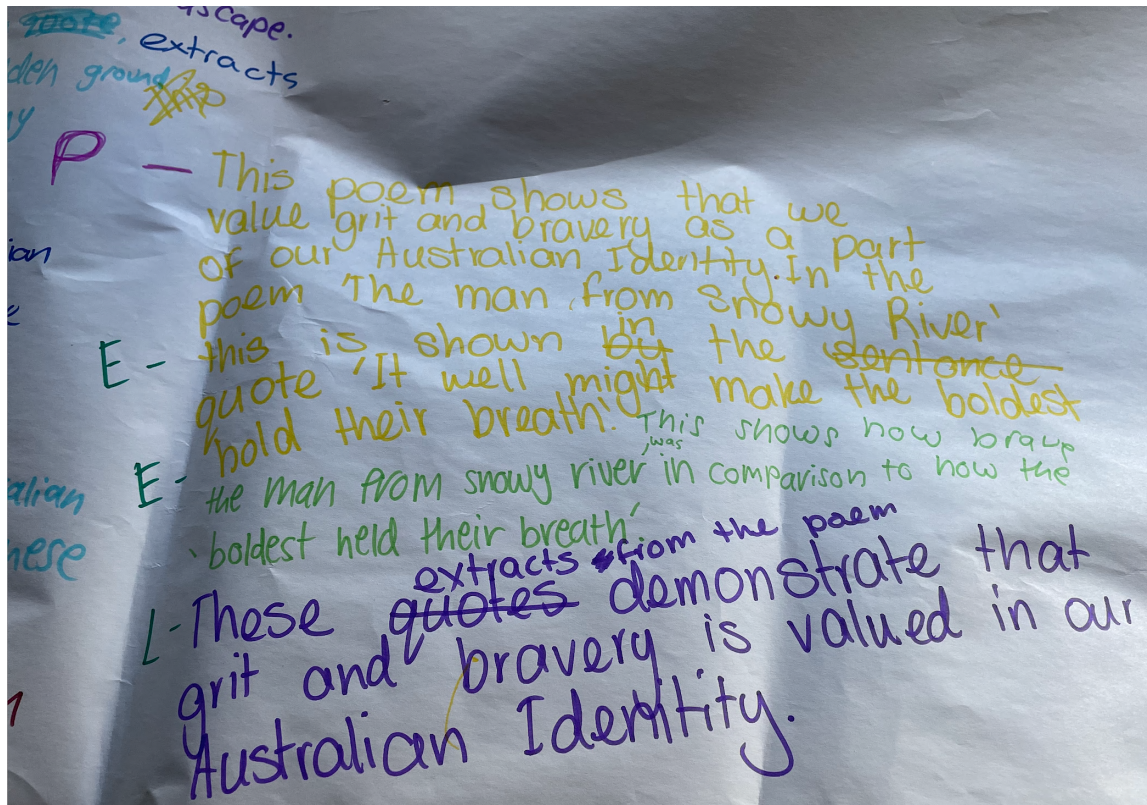


Figure 5.9

'PEEL' paragraph responses from a group in the Year 8 English class



To partake in critical thinking, English students must confidently understand, question, and qualify their interpretations of a text using textual evidence and analysis. The students in this class demonstrated the ability to think critically about the text with teacher support. Although many students in this class could not confidently pose critical questions about the poem unassisted, the modelling of critical questioning by all three teachers helped to facilitate this process and pave the way for critical reflection in the future. In a post-lesson reflection, both Marcus (Interview with Marcus, 2022) and Dominique (Final Interview with Dominique, 2022) expressed the importance of modelling conceptual thinking and PEEL paragraph writing for this class to help orient them towards critically reflective learning, as they were still being introduced to this capability. During the pandemic, Marcus (Interview with Marcus, 2022) felt that this cohort was not able to develop their critical thinking and analytical skills to the level of past cohorts due to the limitations presented by remote teaching. Furthermore, Dominique, Marcus, and Jeremy all attributed this to the classroom dynamic and the fact that this group of students were not yet ‘good collaborators’ and did not communicate well as a group because remote learning did not afford them exposure to in-person collaborative learning experiences. When speaking with Dominique (Final Interview with Dominique, 2022) about this, she believed that the unequal distribution of male and female students in this class meant that female student voices were often muffled by dominant male voices. This also influenced Dominique’s (Final Interview with Dominique, 2022) decision not to explore the idea of masculinity in the poem, as she supposed that the resulting discussions would disengage her male students. The challenge faced by all three teachers reveals the intrinsic relationship between strong collaboration and communication skills and the ability for students to engage in critical thinking, and by extension, critical reflection. Thus, if 4Cs competencies like teamwork, grit, and influence are not present amongst learners, then it becomes increasingly challenging for students to partake in the social learning that is required to critically reflect.

5.4 Guiding Learners Towards Critical Reflection

In Violet's Geography class, her students were guided to critically reflect by having the process of identifying assumptions modelled to them, to ease their participation in the first stage of the Crucible. Throughout her lessons, Violet would present assumptions about a topic to students in various ways to activate critical questioning and reflection. In post-lesson debriefing sessions, Violet (Final Interview with Violet, 2022) openly acknowledged that the process of identifying and sharing assumptions was often met with hesitation in her classroom, because students were afraid to express their true feelings in front of their peers. Finding a way to work through this barrier enabled students to find their voice and develop the confidence and vulnerability to share their beliefs without fear of judgement. Violet demonstrated how this could be achieved by first presenting and exploring different assumptions about a topic from a third-person POV to model how students could progressively articulate and share their own.

When students began studying the impacts of tourism, Violet used the content to model the types of assumptions her learners would encounter in this unit, to then explore and deepen their understanding of those diverse perspectives. Below is an example of observation notes taken from Violet's Year 8 Geography lesson on the 9th of June, 2022, which focused on 'assumptions about tourism' more broadly. This information provoked student discussion about the following assumptions:

COVID has hit the tourist industry badly- economies are struggling and...

- All tourism is negative
- Tourism destroys culture
- Tourisms' positives outweigh its negatives
- Tourism is more about what you get than what you give

(Observation notes for Violet's class on the 9th of June, 2022)

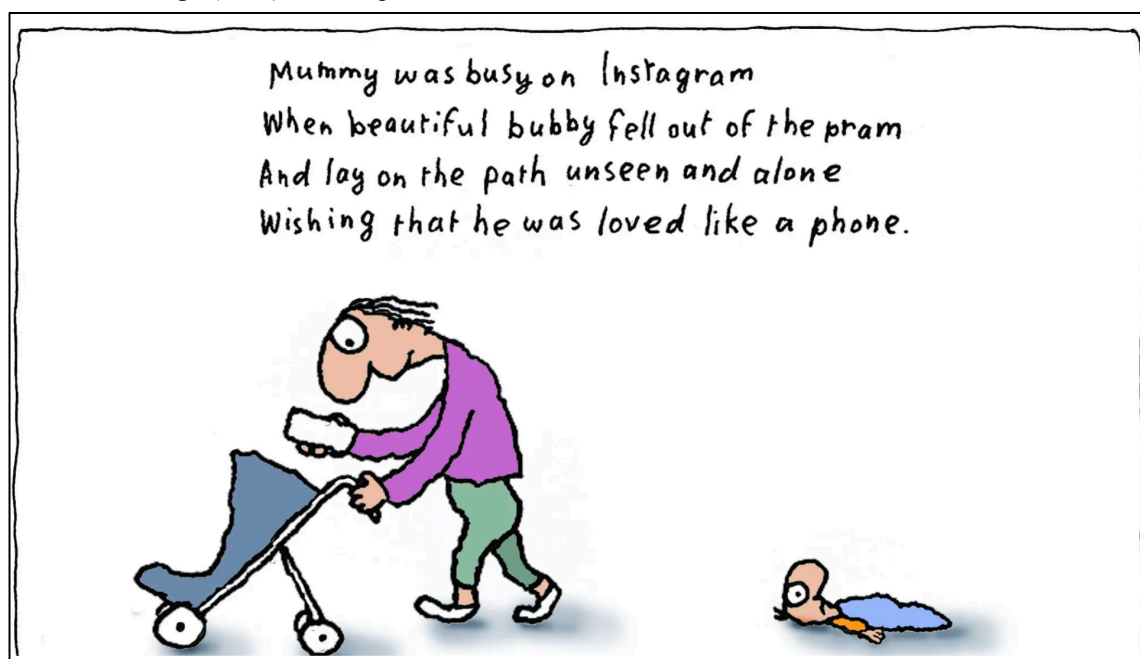
These assumptions about tourism stimulated critical thinking as students were forced to determine the extent to which they agreed/disagreed with each perspective and then consider why this was the case. The benefits of presenting Stage 4 learners with assumptions about a topic in this way is twofold. Firstly, students learnt how to articulate an assumption in writing and were provided with an example to follow when communicating their own. Secondly, students were prompted to respond to the assumptions to determine their attitudes towards each statement, thereby assisting them to identify their own assumptions in a more covert way to minimize any anxiety around this process. This can be achieved using first-person language, for example, ‘I think/believe...’ statements. Demystifying the process of identifying assumptions is an important initial step in empowering learners to participate in critically reflective learning.

Contrastingly, another way to model what an assumption looks like is to present students with real-life perspectives surrounding their topic of study. This example is taken from the start of the Year 8 ‘Interconnections’ unit where students were initially exploring technology and its capacity to connect or disconnect people. The focus across two lessons was a cartoon/poem produced by Australian cartoonist Michael Leunig (2019) titled *Mummy was busy*, which was disseminated in an article published by the newspaper, *The Age*, in 2019 (see Figure 5.10). Once students had studied the cartoon, they were invited to uncover and question the assumption behind it; being that parents should not use their phones while watching their children, otherwise they are labelled a ‘bad parent’. Violet showed her class an anonymous Instagram post where an angry mother spoke against the contents of Leunig’s (2019) cartoon, expressing an emotive counter-perspective. This post was instructive and powerful because it revealed to students what a strong perspective looked and sounded like, particularly when it was read aloud to the class. This was further emphasised by Violet (Observation notes for

Violet's class on the 9th of June, 2022) when she prompted students to consider the post more deeply by stating, "Can you hear the anger? Can you hear the passion?" As students reflected silently on the post, Violet encouraged her class to 'sit with' this reaction for a period, to allow their initial thoughts and feelings to surface. The emotional learning embedded within this activity was palpable, as students were forced to confront an emotionally charged perspective that rejected the assumption that students believed Leunig (2019) was communicating in his cartoon. By modelling these conversations, Violet taught her students to exercise empathy and understanding when encountering assumptions that did not align with their worldview rather than simply dismissing them. Participating in open and respectful discourse to deepen one's understanding of another's perspective is a crucial part of critical reflection as it leads the learner towards "new, more empowering ideas and practices" (Fook, 2007, p. 40).

Figure 5.10

Michael Leunig's (2019) cartoon/poem



Note. From MUMMY WAS BUSY, by Leunig, M. (2019). <https://www.leunig.com.au/works/recent-cartoons/988-mummy-was-busy>

Reflective and collaborative tasks can guide learners towards participating in critical reflection. In one English lesson, Jeremy trialed the 4Cs process ‘speaking into the void’ with his class to introduce them to a new way of participating in group discussion. By building skills in collaboration and communication with this Year 8 class, Jeremy equipped them with the capabilities to participate in critical reflection. This process was used to help students reflect on the PEEL paragraph writing exercise that they had completed in groups about how the poem, *The Man from Snowy River* (Paterson, 2008/1890), expresses ideas about the Australian identity. Before students began, Jeremy first explained the concept of a ‘void’ to students as an empty space where they could ‘throw’ their ideas to stimulate thinking and discussion. Although Jeremy admitted after the lesson that this wasn’t the best time to trial this process with students (as it was the last period of the day and many students were missing from the class), it was interesting to observe how students responded to it.

‘Speaking into the void’ is a process that opens-up space for students to “play with possibility” and express themselves freely in a group situation (Jefferson & Anderson, 2017, p. 75). It creates a safe space for students to notice and speak their minds, and in this case, discuss their experience of participating in collaborative PEEL paragraph writing. The process was met with mixed reactions from students, but ultimately sparked conversation about the advantages and disadvantages of PEEL paragraph writing. Sharing their assumptions in this space for the first time was challenging, and many students did not participate in the discussion or were unresponsive unless prompted by the teacher. Following this, students were asked to take those experiences and share them on the whiteboard using markers, which enabled those who did not speak to share their reflection using the written mode. Student responses (Observation notes for Jeremy’s lesson on the 23rd of June, 2022) included things like:

- It helps back up your points

- It's easy to write in groups
- It's harder to write in groups"
- PEEL can sometimes feel formulaic- Too rigid in structure (spoken by Jeremy)

5.5 Teaching using Multimodal Provocations

The use of provocations was encouraged and spoken about at the start of the study, to offer teachers a way to spark interest in their topic in a critically reflective and creative way. To provoke critical thinking and reflection, I encouraged teachers to create multimodal provocations to account for the way knowledge is communicated to students in their daily lives. Conceptualised as any type of stimulus that incorporates two or more modes of communication (visual, linguistic, spatial, gestural, and aural) to make a statement, multimodal provocations support the formation of ideas and perspectives in learners (Haughey & Hill, 2017) and have the potential to expand the possibilities of interacting with and interpreting a text across any KLA. When a learner's horizons are broadened and their assumptions challenged, this paves the way for critical reflection and emotional reactions to occur, which shapes their assumptions and actions as a learner. Whilst a provocation could include any stimulus relevant to the text being taught, such as a thoughtful quote, artwork, or YouTube video, it is the way the provocation is presented to students through various lines of questioning and reflection that sparks their critical and creative thinking, and by extension, critical reflection.

In Year 8 Geography, Violet showcased what a multimodal provocation could look and feel like when fostering critical reflection and deep learning. The first example was taken from a lesson where Violet began with a deep noticing activity that was paired with music, a stimulus, and a subsequent discussion of students' noticings (observations) (Observation notes for Violet's lesson on the 9th of June, 2022). The stimulus was firstly presented to the class on the

electronic whiteboard, which depicted a cartoon drawing of an ocean with tourists floating about surrounded by plastic rubbish, a cruise ship floating alongside them, and a city with buildings in the distance. The cartoon was captioned with the words “Um, where are we again...?” (Observation notes for Violet’s lesson on the 9th of June, 2022). Students were told to notice as much as they could about the stimulus, whilst music played in the background. The music was used as a measurement of the time students would spend noticing the image (approximately two to three minutes) but also heightened the emotionality of this viewing experience in a unique way. The music was purposefully chosen by Violet to add a despondent and dark tone to the stimulus, to emphasise the negative impacts of tourism that students were to be studying in this lesson. The mood created by this viewing experience was reflected in one student’s response, as they noted “the music sounds like death- people are dying” (Observation notes for Violet’s lesson on the 9th of June, 2022).

Once students had finished their deep noticing of the cartoon, Violet led a ‘speaking into the void’ activity to debrief noticings with the class (Observation notes for Violet’s lesson on the 9th of June, 2022). Students stood in a circle and spoke their noticings into its center; adding, commenting, and listening to each other’s responses in this space. This activity can be viewed as a multimodal provocation because of the way it combined a visual stimulus (with writing) and music to provoke a response from students about the negative impacts of tourism on places. The second part of this provocation involved a question that Violet posed to her class to deepen their thinking during the debrief. Students were asked to consider the following question: “Is it possible for people and places to coexist?” (Observation notes for Violet’s lesson on the 9th of June, 2022). This question is tied to the second part of the provocation because it compelled students to think critically about the responses shared and form an opinion, which they were then asked to justify. These responses and part of the debrief is included in the opening poem

to Chapter Five, as it highlights a significant moment of critically reflective learning for this class.

5.6 ‘Holding the Process’: Practising 4Cs Processes to Foster Critical Reflection

Participation in 4Cs processes enables students to build competencies from the LDW to effectively engage with the 4C capabilities. The processes used across both Year 8 classes primed students for critically reflective learning. Warm-in activities feature prominently in a 4Cs approach to help students acclimatise to the skills they will be practising in each lesson. A warm-in activity can be imagined as both a physical and mental ‘warm-up’ for the learning processes being introduced throughout a lesson, with the goal to get students talking, moving, and interacting with one another to build competencies needed to engage with the 4C capabilities. In Year 8 Geography, Violet employed a warm-in activity called ‘verbal tennis’ which promoted discussion, pair work, and focus amongst learners. In one lesson, I observed how this warm-in activity primed students for critically reflective learning around the topic of responsible versus irresponsible tourism.

Verbal tennis is a warm-in activity that is played in pairs. Students are provided a question, and they must engage in a ‘long rally of ideas’ with their partner to share their responses. This activity is engaging and playful, as it encourages healthy competition whilst allowing partners to bounce ideas off each other to share knowledge and build understanding. In essence, the last person standing with their idea wins. The nature of the question provided to the pairs is important, as it sparks the critical reflection process. Violet designed a ‘*why?*’ question for this activity, namely: “Why do people travel to Bali?” (see Figure 5.11) (Observation notes for Violet’s lesson on the 23rd of June, 2022). The ‘*why?*’ question necessitates reasoning and invited students to unearth their prior knowledge and assumptions about this topic, thereby

setting themselves up for critical reflection as they moved through the lesson activities. The warm-in activity took its physicality from the way that students participated in verbal tennis standing with their partner, so that it became a way for students to activate their mind and bodies in this short amount of time. The activity lasted approximately ten minutes, with just enough time to allow for learners to get into a flow and practise it multiple times, with the aim of beating their scores. The idea of participating in a ‘long rally of ideas’ supported turn-taking, the sharing of ideas and perspectives, and the vital skill of listening to one another.

Figure 5.11

A Power Point slide that introduces the question for the verbal tennis activity



Note. Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides].

In Violet’s classroom, there was a concerted effort to give students the floor to be heard by their peers, which was reflected in the way she facilitated her warm-in activities. In this session of ‘verbal tennis’, Violet spoke to the pairs in the room and asked them to “give each other space and silence”, emphasising what respectful conversations should look and sound like in the classroom (Observation notes for Violet’s lesson on the 23rd of June, 2022). This form of reciprocal communication is paramount to critically reflective learning and is a vital skill that learners must build if they wish to encounter new perspectives. As pairs engaged with the warm-in, Violet noticed that some pairs were less receptive to the process and needed additional support, which she provided through model responses that were written on the whiteboard for

pairs to use. The type of language used here was modelled using sentence stems including, “maybe...” “perhaps to...” and “for example...” (Observation notes for Violet’s lesson on the 23rd of June, 2022). Time was reserved at the end of the warm-in for reflection on the process as a whole class. It is here where Violet invited students to consider what they noticed about the process. Some noticings shared by students included, “I got five in a row,” and “you [Violet] helped us!” (Observation notes for Violet’s lesson on the 23rd of June, 2022). Here, students who were initially resistant to participating in the activity found it easier to complete once they were provided with one-on-one support from their teacher. Where time permitted, Violet took the opportunity to tie every process back to reflection, which acted as the glue that bound and clarified the processes adopted in this 4Cs approach. Notably, the transition to the next activity went far more smoothly after students engaged in their warm-in activity, as they practised ‘speaking into the void’ to share their ideas about responsible versus irresponsible tourists.

When students engaged in the process of ‘speaking into the void’, they were taught to share their ideas more autonomously by breaking free of the inherent need to raise their hands to share a thought. This process challenged learners to speak their ideas openly and freely into the empty space in the middle of the circle, which they could do at any time once the process began. The key to mastering this process was by observing the people around the circle, to see who was ready to speak, to honour the speaker, or to negotiate if two or more people spoke at the same time. When students engaged in the deep noticing activity that used the visual stimulus and music in Violet’s lesson, they then participated in a ‘speaking into the void’ process. What was notable about this version of the process was the language Violet used to support students. In this example, Violet noticed that some students were not being patient and began talking over one another, thereby prompting her to ask the group to “hold the process” (Observation notes for Violet’s lesson on the 23rd of June, 2022). This line is powerful because

it redirected students' focus in this moment. Violet then continued by inviting those students who had not yet spoken into the void to share their ideas and 'speak them' into the middle of the circle. This process similarly allowed students to participate in respectful conversations and begin to listen in a different way, by reading and interpreting bodily cues (Observation notes for Violet's lesson on the 23rd of June, 2022). By participating in this process, students developed communication skills that helped them to have provoking and critical conversations during critical reflection. Over the course of this study, Violet's Geography class progressively improved their ability to engage in such 4C processes, to the point where they had developed routines, especially when practising the 4Cs process, 'speaking into the void.' Their familiarity with this process and the fact that students could organise themselves relatively efficiently to participate in it whenever Violet used it in a lesson reveals its power.

4Cs processes tend to be highly collaborative to enhance skills in teamwork, grit, focus and social learning, thereby strengthening the capability of critical reflection. In Year 8 English, students became more adept with collaboration as a pathway to critically reflective learning using 4Cs processes. The game '21' is an example of a collaborative process that helped students to build rapport with one another and learn to work together as a team to achieve a common goal. When I began observing this class, it was clear that students were not great collaborators, as this was voiced by Dominique, Jeremy, and Marcus. During the start of one lesson, Marcus decided to incorporate some collaborative games to begin the lesson and help students get to know each other and break out of their comfort zones. The game played was called '21', where students stood in a circle and counted aloud to 21 without speaking a number at the same time as someone else in the circle. The game is based on observational cues and the group must work together to interpret when someone is about to speak. When students played it initially, they could not get past the number four. Students were not focused and were

unsettled, and they did not make a concerted effort to work as a team. Marcus also mentioned to students that collaborative activities are supported by evidence from research that reveals how they enhance their communication and collaboration skills so that they can work better with one another in different contexts. As the game continued, Dominique noticed that the game was stalling. She asked the group to think of a strategy that would help the class reach 21 faster. Markedly, this was trialed in the next round and the students were able to reach 21 on the first go.

During a post lesson debrief, both Marcus and Dominique sat down with me to reflect on the success of the collaborative games in this lesson. Both teachers agreed that students were far more focused after the collaborative activities despite some initial resistance to the process. Students were asked if they enjoyed the games with mixed responses. The processes used in these collaborative processes allowed these English students to become better equated with each other as a classroom unit, whilst also becoming familiar with each other in anticipation of collaborative activities. Although students were resistant to collaboration and tended to stick with friendship groups in the past, by the end of the study they had gaining confidence with their ability to work as a team and collaborate on learning projects in their poetry unit.

5.7 The Crucible as a Teaching and Learning Tool

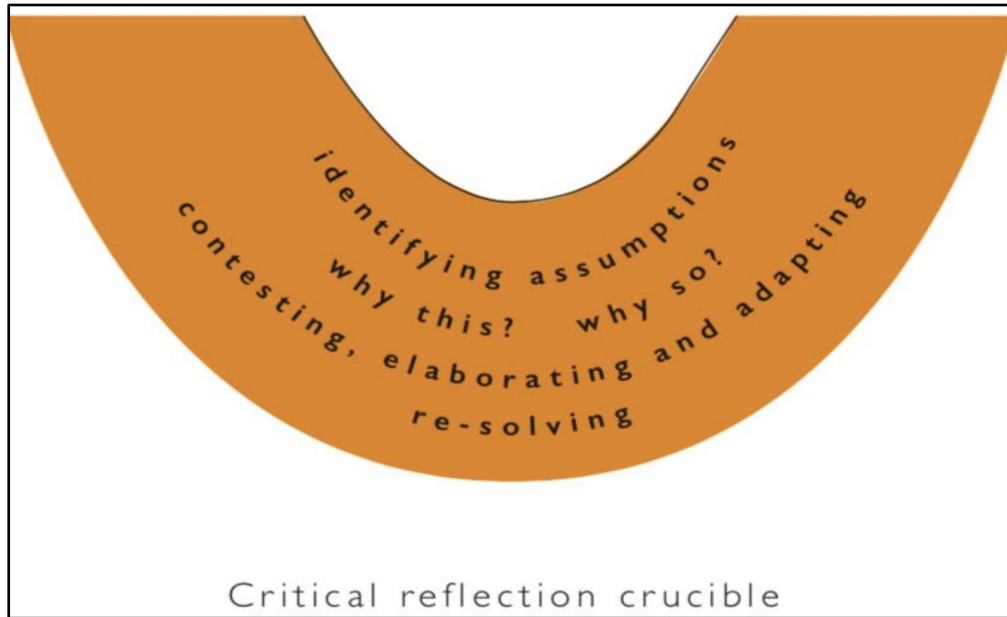
Teaching and learning using the Crucible is not a hidden exercise in the 4Cs classroom but instead, is a visible interpretive endeavor between teacher and students. Violet's Geography class provides insight into how the Crucible is used by students purposefully during learning to facilitate critical reflection so that the process is visible to everyone. During my second visit to Violet's Geography class, students participated in an activity where they responded to hypothetical statements about the impacts of tourism using the Crucible coherence maker.

Violet offered students several statements that represented various assumptions about tourism (both positive and negative) which students would then ‘pour’ into their hand-drawn Crucibles. These statements included: “affects religion, affects language, destroying the structures and land, disrespecting the culture, mainly harms and doesn’t help, affects the people who actually live there” (Observation notes for Violet’s lesson on the 20th of June, 2022). Once students ‘poured’ the statements into the Crucible, they could add their own statements and any other related ideas they wanted to ‘test’ as they reflected during this task. The blueprint for drawing the Crucible was provided to students using the image below (see Figure 5.12), which was projected onto the electronic whiteboard along with these statements during this activity. Before they began, Violet revisited the idea of the Crucible with her class, discussing their prior learning about the coherence maker, its purpose, and its specific use in this activity. In prior lessons, Violet taught students to differentiate between the appearance and use of the physical Crucible (used predominantly in scientific laboratories) and the theoretical Crucible (see Figure 5.12) that assisted students to imagine and practise critical reflection in the context of the 4Cs approach. Here, Violet highlighted the heat of the Crucible and what it equated to (Observation notes for Violet’s lesson on the 20th of June, 2022). A crucible scientifically requires heat to test the purity of the substance being poured into it. In a 4Cs learning context, this same analogy is adopted and given new meaning. The heat in students’ theoretical Crucibles can equate to many things that exemplify the process of critical reflection including:

- questions
- new perspectives
- discussion and/or student talk

Figure 5.12

The critical reflection Crucible coherence maker visual poster used in Violet's lesson

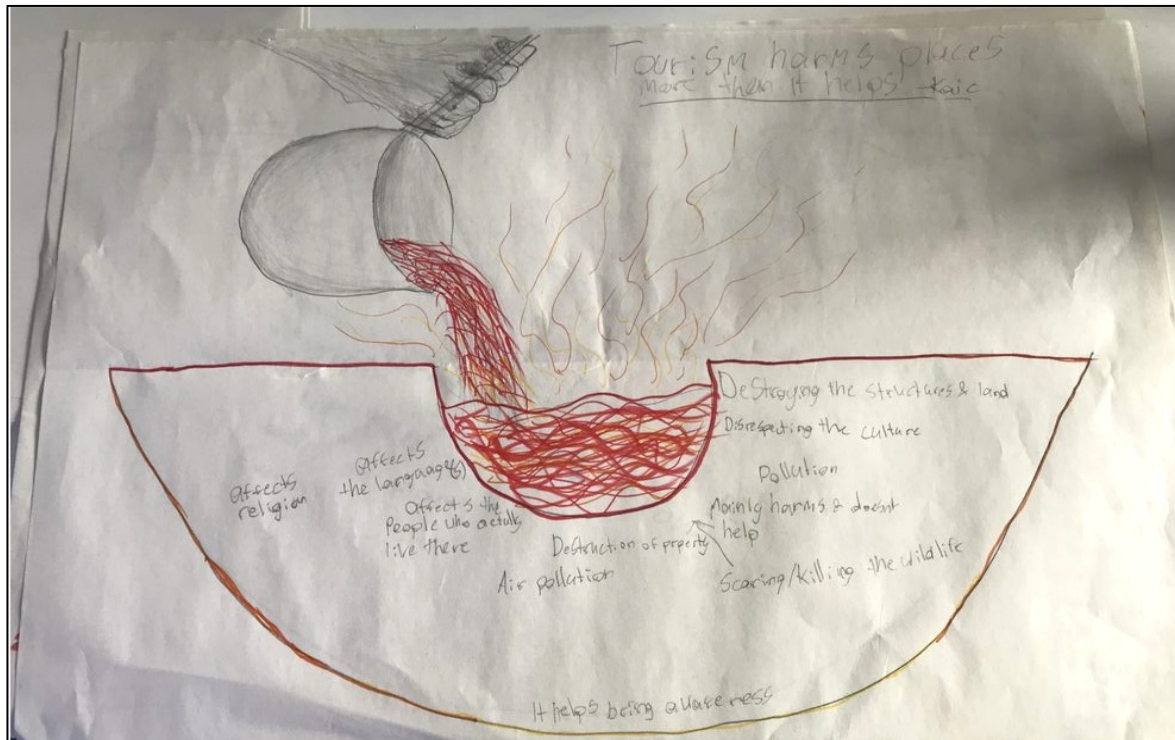


Note. The visual poster of the critical reflection Crucible used by Violet in this lesson is an old version reproduced in her PowerPoint slides from 4C Transformative Learning (2017). Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides].

During this activity, students had the creative freedom to design and personalise their hand-drawn Crucible beyond the image (see Figure 5.12), which acted as a framework. During this, I spoke with one student named Jay and observed him as he engaged in this creative process. Students used A3 paper to draw their Crucibles to begin this activity and then populated it with the statements curated by Violet, and their own additional ideas. Jay was working independently and had already begun to design his Crucible when I spoke with him during this lesson. Pictured below is a work sample of Jay's completed Crucible (see Figure 5.13) which demonstrates his versatile and creative design.

Figure 5.13

A work sample from a Year 8 Geography student named Jay showing his completed Crucible drawing



Notably, Jay chose to draw two Crucibles working together to help represent his critical reflection of the statements during this activity. When asked about the design of his Crucible, Jay pointed to the inclusion of a handle which can be seen on the smaller drawing of the Crucible that is doing the pouring action (see Figure 5.13). Jay quotes, “I made the handle like this because it has a little curve here...So it’s actually easier to handle it. If it was just straight it would slip out of your hands, especially when wearing...wearing gloves” (Student Interview with Jay, 2022, lines 18, 20-21). The way that Jay personalised his Crucible reveals that he thought logistically about the Crucible design. The handle that formed part of the smaller Crucible became an accessory, which therefore made it more versatile and exemplified Jay’s creativity. This also reveals Jay’s critical thinking, as he anticipated the way that the Crucible could be handled physically, as a scientific instrument. The fact that the Crucible is depicted with a “little curve” demonstrates Jay’s attention to detail to personalise his Crucible (Student

Interview with Jay, 2022, line 18). This is reinforced by the fact that Jay chose to include a smaller Crucible working alongside a larger one in his drawing. Furthermore, since Jay considered how the handle makes the Crucible easier to use when wearing gloves, this highlights how he has imagined the Crucible in a literal, concrete way, which links back to how the Crucible was initially introduced by his teacher.

When introducing the Crucible to her class, Violet used a combination of written definitions, notes, and visual aids of existing Crucibles to show students their appearance and real-world function (see Figures 5.14-5.18). There is a noticeable physicality to how Jay interpreted the Crucible, as he imagined it like a tool that needed to promote a strong grip. Jay (Student Interview with Jay, 2022, lines 23-24) continued to explain his design by stating how “it makes it slipperier. So you have the handle like that, so you can actually get a better grip on it.” Notably, Jay also chose to include and emphasise the flames that emanated from the lava that was being poured from one Crucible to another, which symbolised the statements and assumptions that were being figurately ‘poured’ in (see Figure 5.13). Jay (Student Interview with Jay, 2022, lines 28-29) described how the flames purposefully formed part of his Crucible by informing me that, “on the top, these are the flames where...when I have the, um, ideas and all that link off.” The flames represent the talk around the topic being critically reflected upon, which Violet thoughtfully phrases as ‘respectful talk’ that allows students to share, contest and inform/adapt their assumptions. Jay agreed that he was ‘testing’ these ideas as they were being figuratively ‘poured’ into his Crucible. Significantly, this reveals how emphasis is placed on both the process as well as the outcome when working with the Crucible coherence maker.

Figure 5.14

A PowerPoint slide that explains the idea of critical reflection

Link the term critical reflection and the term crucible.

Critical reflection allows us to take what we've learnt from past experiences and feedback to trial new ideas and ways of working. This process can lead us to creating new and greater ideas and pieces of work.

In the physical idea of a crucible, critical reflection represents the change of opinions and the 'remoulding' after hearing feedback and others ideas and opinions.

Note. Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides].

Figure 5.15

A PowerPoint slide that depicts what a Crucible looks like in a real-world context



Note. Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides].

Figure 5.16

A PowerPoint slide that offers two definitions: critical reflection and critical thinking

Critical Reflection

Definition 1: (Critical Reflection) Critical reflection is a "meaning-making process" that helps us set goals, use what we've learned in the past to inform future action and consider the real-life implications of our thinking.

Definition 2: (Critical Thinking) The objective analysis and evaluation of an issue in order to form a judgement.

Note. Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides]

Figure 5.17

A PowerPoint slide that explains the breakdown of the Crucible and the connection between each part

Critical reflection

- Critical reflection is an extension of critical thinking. It asks us to think about our practice and ideas and then challenges us to step back and examine our thinking by asking probing questions.

Crucible + Critical Reflection - attempting to explain their connection...

- **Fire in the crucible** = when we disagree with each other respectfully, this is the fire in critical reflection.
- **Different elements interact in a crucible** = In the classroom, each student brings different ideas, thoughts and experiences into the room.
- **A crucible leads to the creation of something new** = New ideas, changing your mind/opinion on something is what critical reflection looks like in the classroom.





Note. Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides].

Figure 5.18

A PowerPoint slide that defines and portrays what a Crucible is and how it functions in a real-world context

Crucible

- A ceramic or metal container in which metals or other substances may be melted or subjected to very high temperatures.
- A situation of severe trial, or in which different elements interact, leading to the creation of something new.



Note. Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides].

5.8 Critical Reflection and Creativity

When Dominique, Marcus, and Jeremy introduced their Year 8 English poetry unit, students participated in a black-out poetry creation activity that showcased their engagement with poetry, critical thinking, and creativity. Students began their poetry study by reading and critically analysing a traditional exemplification of Australian identity and patriotism in Dorothea Mackellar's (2021/1908) iconic poem, *My Country*. To consolidate their learning, English students were encouraged to use the poem as a template to build their own through the technique of black-out poetry, where the lines of the original poem are erased or 'blacked out' to leave a new poem in their place (Glatch, 2023). This style of poetry promotes individual creativity through word choice as the writer decides which words to keep, which to erase, and how the remaining words bind to the central theme of their new poem. Similarly, the accompaniment of illustrations aids individual expression of ideas and reinforce the central themes communicated in the blackout poem. The following work samples (see Figures 5.19-5.22) offer a snapshot of how students curated their poems by re-interpreting the words from Mackellar's (2021/1908) original work. The individual student poems are titled *Australia*, *Horizon*, and *Death to my Heart*, whilst one remains untitled.

Figure 5.19

Student Blackout Poem One titled 'Australia'

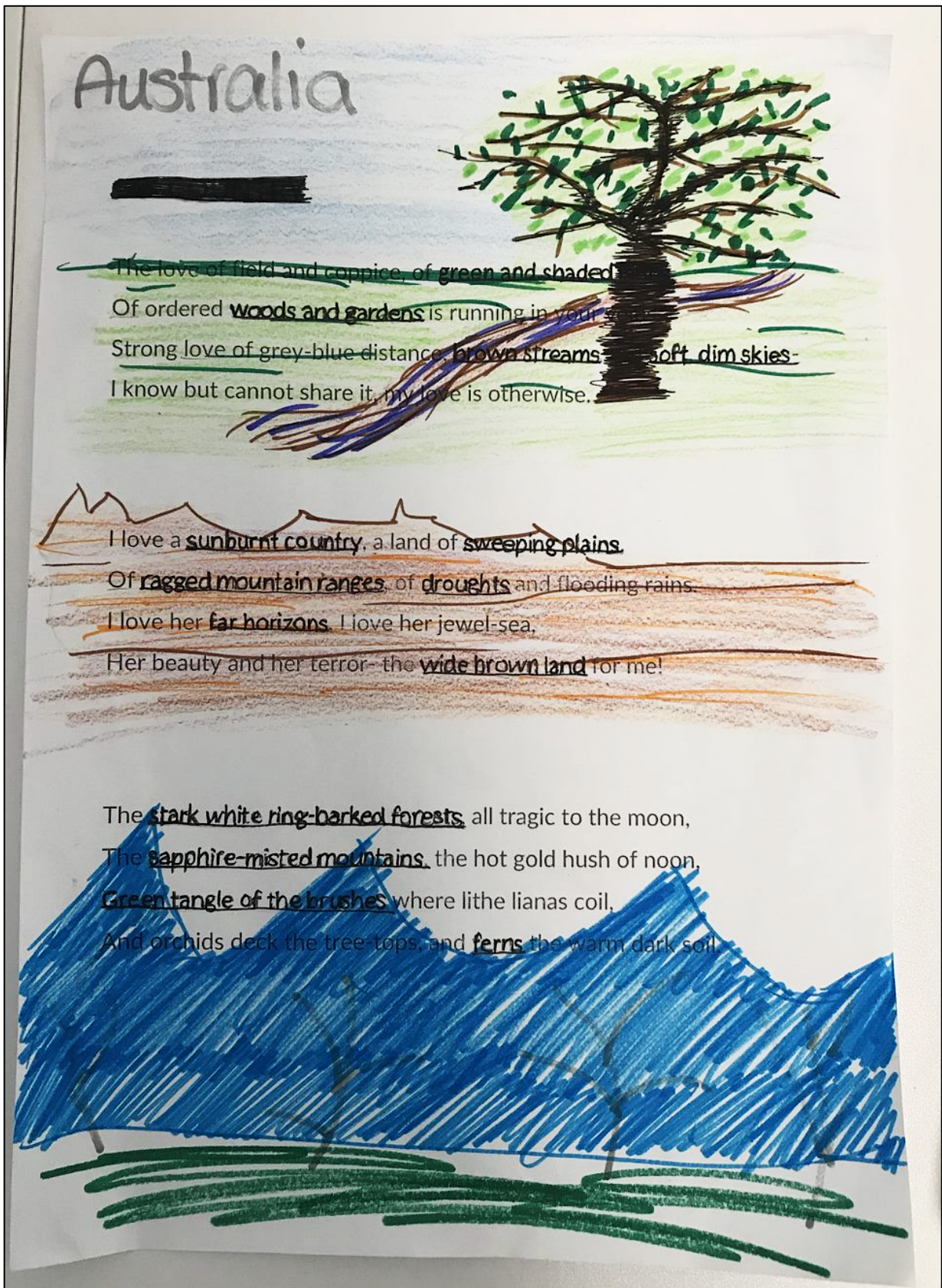


Figure 5.20

Student Blackout Poem Two titled 'Horizon'

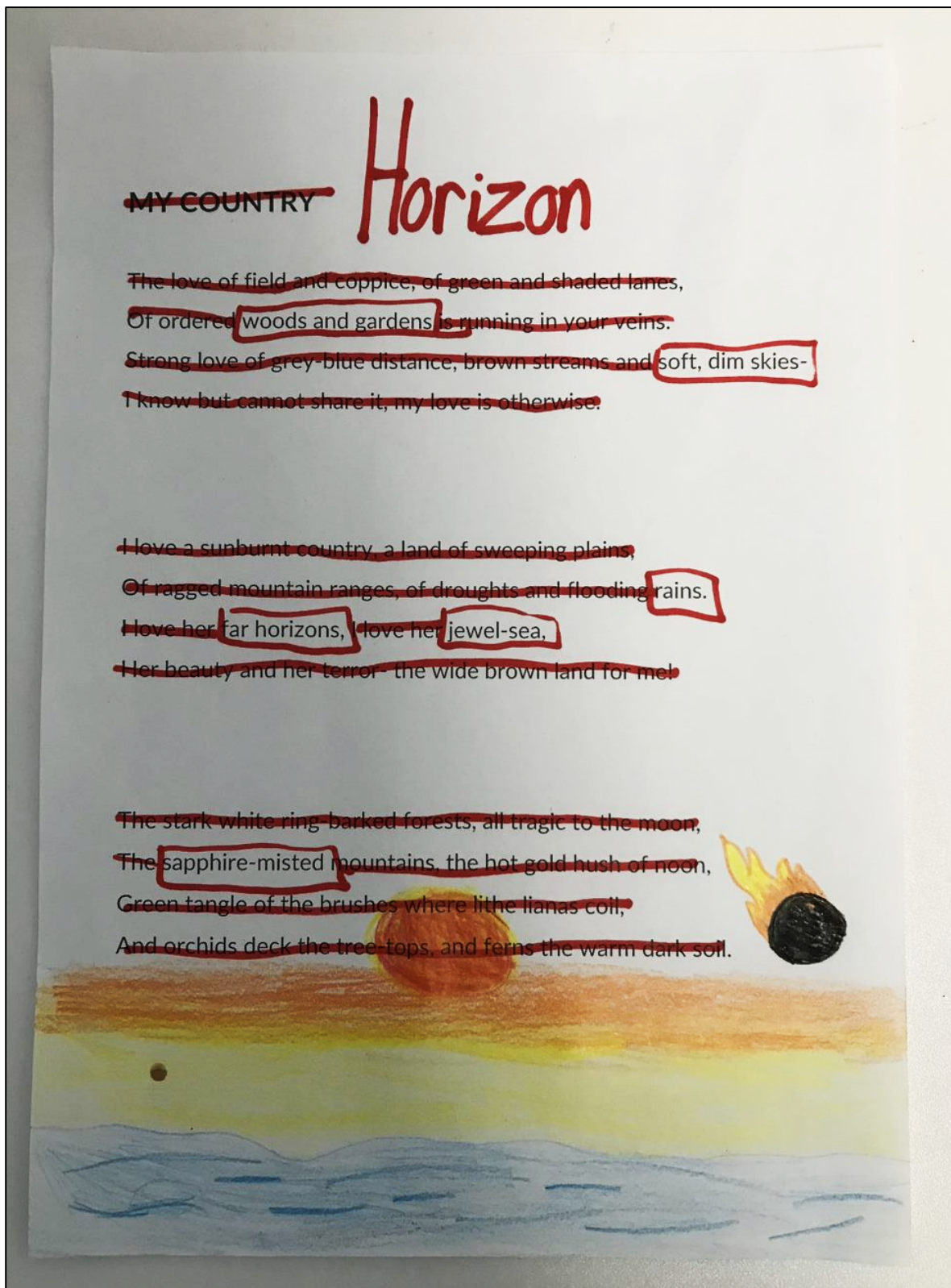


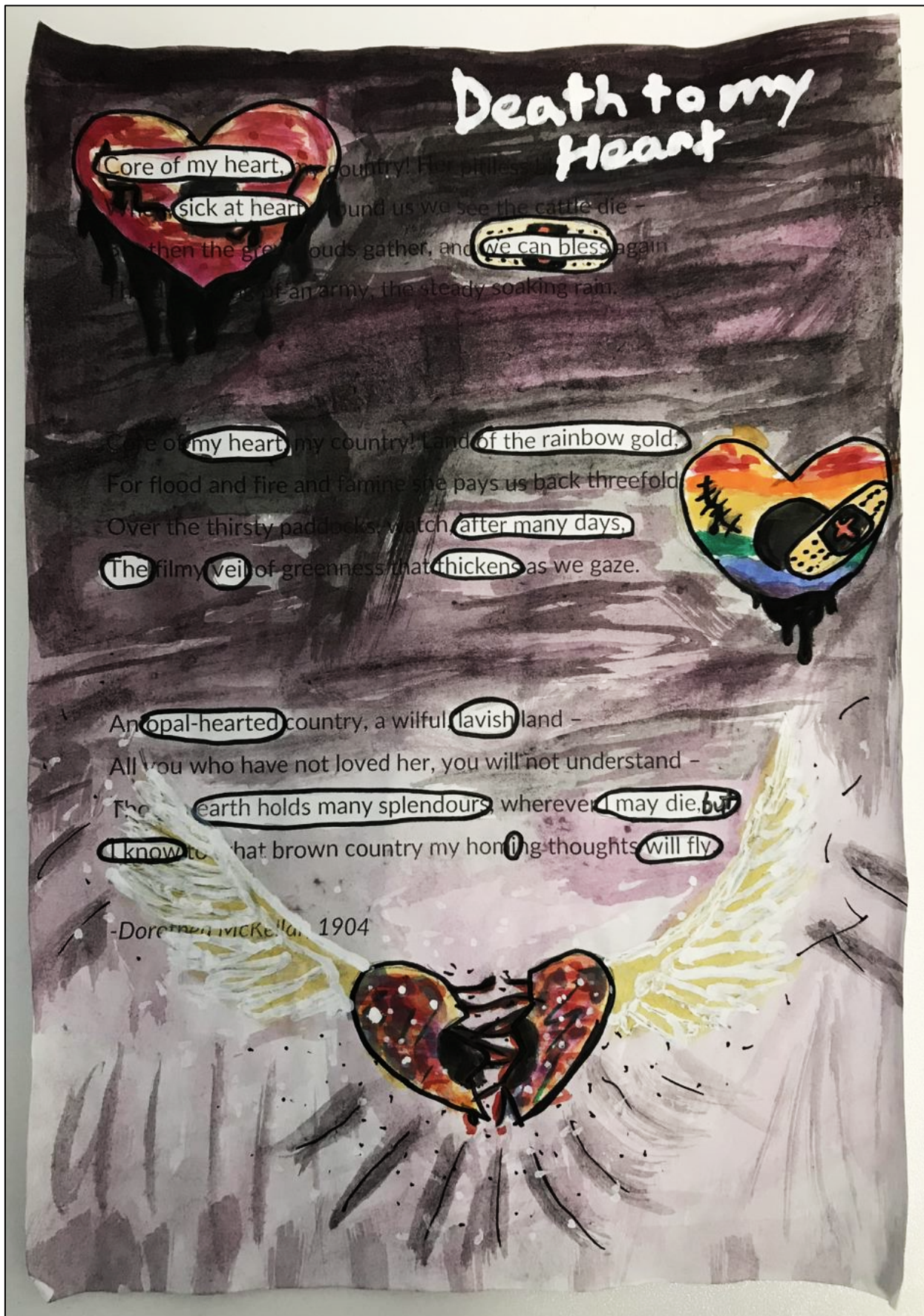
Figure 5.21

Untitled Student Blackout Poem Three



Figure 5.22

Student Blackout Poem Four titled 'Death to my Heart'



In Violet’s Geography class, students expressed their creativity in many ways. An example of this is shown through a critically reflective activity where students were tasked to design a spectrum in groups. In one lesson, students were asked to apply their knowledge of ecotourism to create a spectrum or visual map that represented the actions of a responsible versus an irresponsible tourist travelling in Bali (see Figure 5.23) (Observation notes for Violet’s lesson on the 23rd of June, 2022).

Figure 5.23

A PowerPoint slide that details Violet’s instructions for the spectrum creation activity



Note.

Adapted from Williams, V. (2022, June 23rd). *Part 2- Tourism and critical reflection* [PowerPoint slides].

The spectra created from this activity represent the inherent creativity of each group’s work as they critically reflected on the concept of responsible tourism in Bali. During the lesson, I observed how students worked collaboratively to create their spectrum and document their ideas (Observation notes for Violet’s lesson on the 23rd of June, 2022). Some groups used ticks and crosses to mark each end of their spectrum (see Figure 5.25), whilst others used colour to symbolise the positive and negative side (see Figure 5.24), thereby demonstrating their

creativity through these decisions. Words such as ‘degradation’ and ‘enrichment’ were used to express each end of the spectrum to encourage students to think beyond the binary of positive versus negative and connect the impact of tourism directly to Bali’s environment and culture. As students designed their spectrum in groups, Violet read aloud pre-prepared paragraphs that offered points students could add to their spectrum. Violet paused with the class to discuss each statement and link it to the Crucible, which she presented on the electronic whiteboard so that students knew they would be critically reflecting this lesson. For example, students considered the statement on language which read: “Speaking only English while travelling in Bali degrades Balinese culture” (Observation notes for Violet’s lesson on the 23rd of June, 2022). Violet then challenged her students to take this statement and re-word in in a positive light. Violet (Observation notes for Violet’s lesson on the 23rd of June, 2022) modelled this first by offering the statement: “Make an attempt to speak the language.” Students were then asked to critically reflect on each statement, using ‘*why?*’ questions such as, “Why do you think it is disrespectful to go to a place but not speak their language?” (Observation notes for Violet’s lesson on the 23rd of June, 2022). This posed an opportunity for deep learning, as Violet surfaced the idea of tokenism with her students and invited them to ponder how the actions of a tourist could be seen as tokenistic. At the conclusion of this discussion, Violet explicitly referred to the Crucible to lead a whole-class reflection where students were directed to link their learning to its four stages. Significantly, the onus was placed on the learner to recall how they achieved various stages of the Crucible as a class, as it was not expected that students would demonstrate all four stages in one activity or lesson. Some student responses included, “we asked *why?* questions”, and “we challenged our assumptions” (Observation notes for Violet’s lesson on the 23rd of June, 2022). As students resumed their group work, Violet included words and phrases in Balinese for groups to add to their spectrum. I noticed that many

students also chose to include symbols and illustrations to express the ideas in their spectra, which similarly demonstrated their creative thinking.

The following work samples (see Figures 5.24-5.26) demonstrate students' critical and creative thinking as they engaged in group work to create their spectra. Their critical thinking skills were extended, and critical reflection occurred when learners were challenged to critically consider the statements posed by their teacher about tourism, which they could then add to their group's spectrum. Learners showcased a strong sense of teamwork during this activity, as well as an openness and willingness to trust in the process of critical reflection and explore ideas with their teacher. Notably, the action of creating their own spectrum to represent these ideas as a group allowed them to deepen their critical reflection about the notion of responsible tourism. The ability to represent their reflection through colour, symbols, and illustration allowed students to showcase their reflection in a creative way. Students also effectively demonstrated how they re-solved and transformed their assumptions about travelling as a tourist in Bali, thereby achieving the final stage of the critical reflection process in the Crucible. The class was asked to raise their hands if they would travel to Bali, yet this time, as a sustainable and mindful tourist (Observation notes for Violet's lesson on the 23rd of June, 2022). This exercise mimicked a similar one that Violet performed with her class a few lessons previously, when she posed the hypothetical scenario about travelling to Bali as a tourist. Most students answered 'yes', which revealed how they were able to challenge and better inform their assumptions about being a tourist in Bali because of their critically reflective learning.

Figure 5.24

Group work sample of a spectrum that uses colour

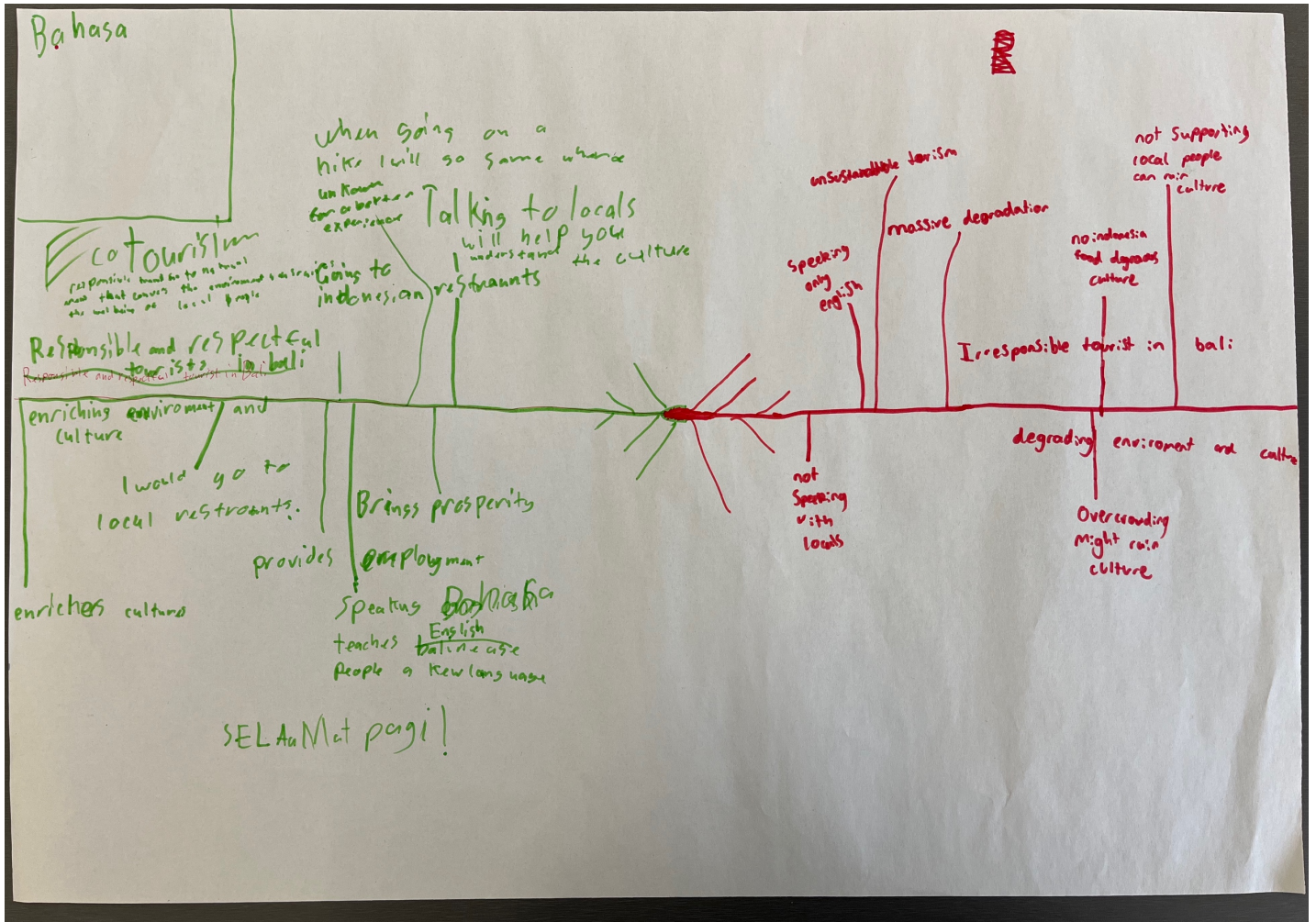


Figure 5.25

Group work sample of a spectrum that uses crosses/ticks and symbols

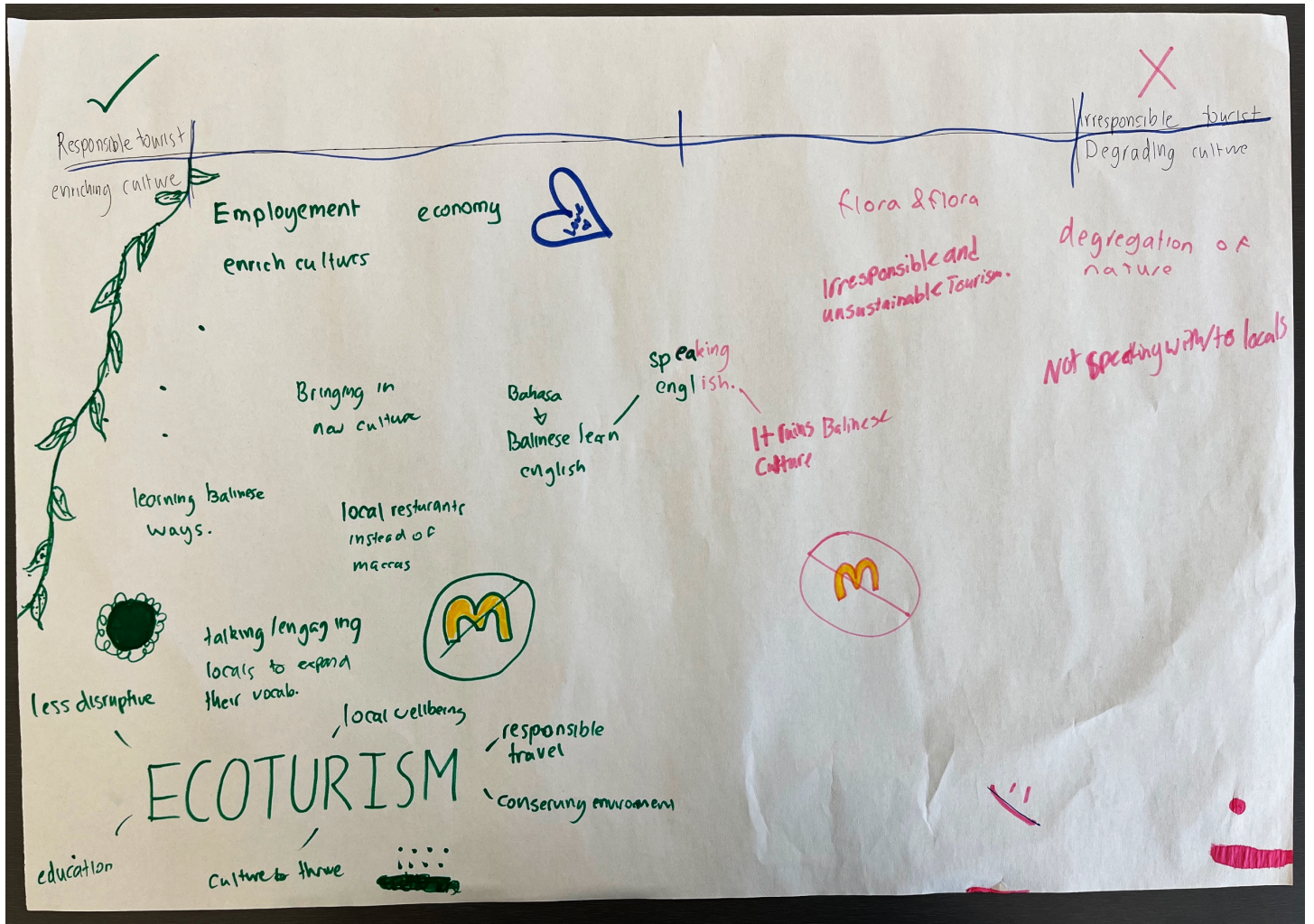
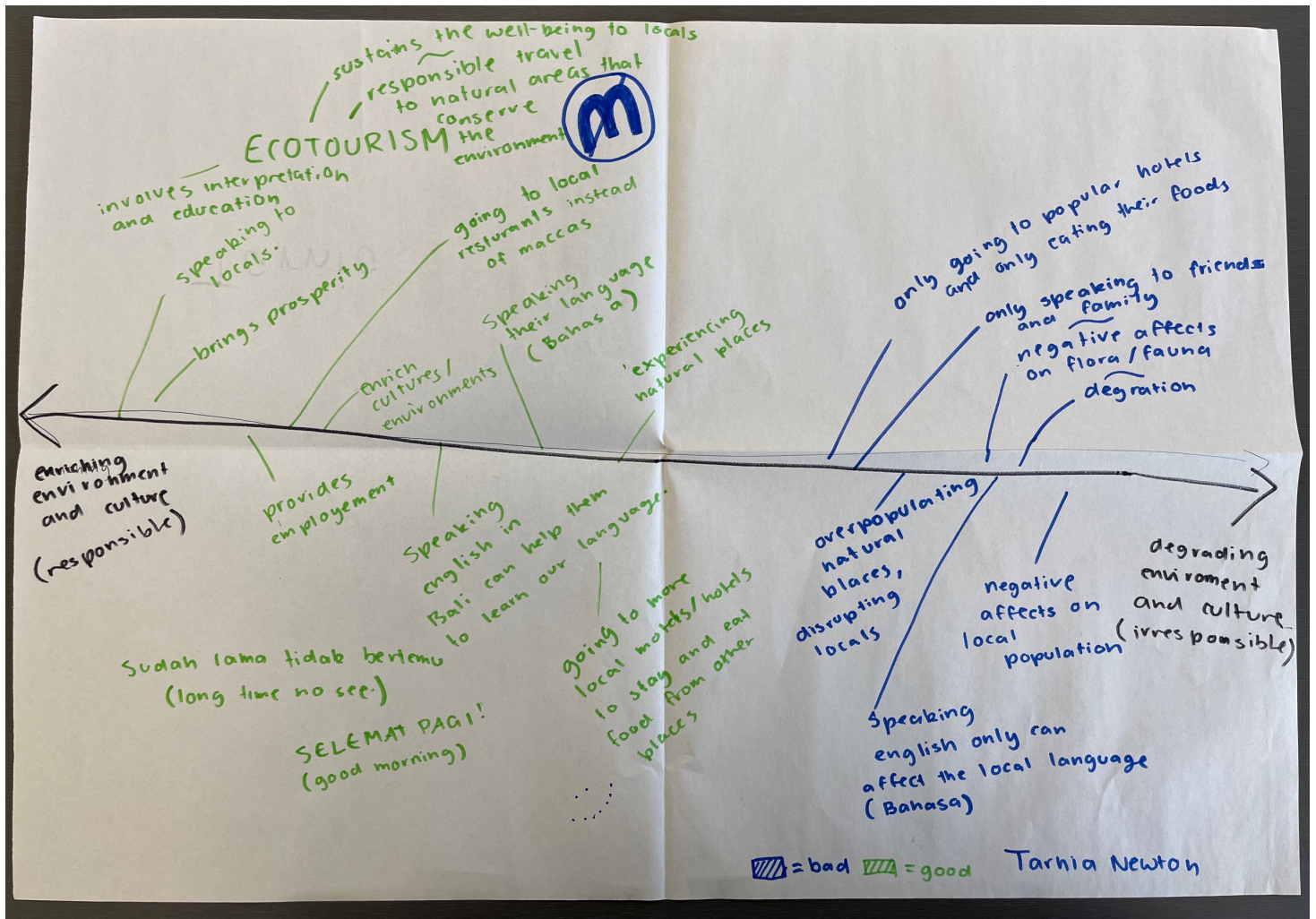


Figure 5.26

Group work sample of a spectrum



5.9 Exploring Diverse Perspectives

A critical sub question posed by this study includes, ‘How can Stage 4 educators frame their teaching of curriculum knowledge through multiple perspectives, voices and/or narratives to activate the critical reflection process?’ Exploring how teacher participants and their Year 8 classes have explored diverse perspectives through observations and student interviews offers insight into the critical reflection process at various points throughout students’ learning journeys.

Before teaching of the poetry unit began, Dominique and Jeremy consulted with me during the planning session about how to embed diverse perspectives into their selection of poetry for this Year 8 English unit. The teaching material or ‘core texts’ that were curated as part of this poetry unit presented both English teachers with an inlet to diversifying the perspectives about Australian identity that they wished to explore and critically reflect upon with their students. A key text that was discussed and served as an interesting provocation for this Year 8 class was Paul Kelly’s (2020) song titled *Sleep, Australia, Sleep*. The poetic value that can be garnered from songs is not lost on English teachers, and this song offered students a unique counter perspective about Australia’s changing environment that could be juxtaposed against their earlier reading of Dorothea Mackellar’s (2021/1908) poem, *My Country*. Kelly (The Environmental Music Prize, 2023) tells audiences that his song can be thought of as a “lullaby that laments climate inaction,” yet paradoxically serves as a wakeup call to the harm that humanity has and continues to inflict on the planet.

My attendance during Jeremy’s lesson where students were discussing their analysis of selected verses from the text revealed the way perspectives were fuelling critical conversations in this

classroom. Students participated in a post-it note activity to share their noticings about poetic techniques learnt in their previous lesson, but this time, they needed to make specific references to where these were apparent in the text. One student offered up the technique ‘connotation’ which they located in the line “with acid seas rising” (Kelly, 2020). This technique sparked a conversation about connotative and denotative meanings in texts, which prompted students to consider the notion of perspective and how the subtext (or connotative meaning) can change the interpretation of a text, thereby shifting the learner’s understanding of its meaning/s. The word ‘acid’ in the line “with acid seas rising” has a negative connotation in this text, as an acidic sea is harmful to marine life and is perceived by Kelly (2020) as an adverse impact of climate change. Conversely, Jeremy introduced a counter perspective by challenging his students to consider what context the word ‘acid’ might be perceived in a positive light. Students recognised that a scientist may apply a positive connotation to this word as they define and associate different meanings to the term ‘acid’ based on its chemistry and application. Ultimately, the critical thinking that emerged from this discussion supported students to understand how experiences can force an individual to imply positive or negative associations about the things or people in their world. Although students were not explicitly working with the *Crucible* to develop their critical thinking about this line in the text, this example demonstrates how the introduction of diverse perspectives during learning and through textual choice can spark the critical reflection process.

In Violet’s Year 8 Geography class, students were most engaged with diverse perspectives when they entered the ‘problem-solving space’ during learning. Once students entered this space, they were forced to grapple with counter perspectives presented to them about the topic of tourism. As students began to critically reflect more throughout the unit, Violet saw that their perspectives

about tourism were shifting and becoming better informed due to their exposure to these different perspectives and narratives. A vital part of the process of critical reflection is accepting that individuals will differ in their values and opinions towards each other, as this is human nature. This was something that Violet communicated to her students constantly throughout the unit to bolster their empathy and nurture open-mindedness, especially when students studied Leunig's (2019) cartoon titled *Mummy was busy* (see Figure 5.10).

After viewing the cartoon and discussing its content as a class, students engaged in a written activity to answer questions about the cartoon and how it responded to the question: Does technology connect us or separate us? (Observation notes for Violet's lesson on the 9th of June, 2022). During this task, I conducted an interview with a student named Zena to gauge her thoughts and understanding of the cartoon and the perspective she believed it was communicating. Zena initially struggled to articulate her thoughts about the content of Leunig's (2019) cartoon but found confidence as she spoke with me. Zena's interpretation of the cartoon emphasises the latter half of the question (Does technology separate us?) posed by Violet to the class, as she focused on the isolation felt by the child (see Figure 5.10). Zena (Student Interview with Zena, 2022, lines 13-15) began speaking about the mother figure in the cartoon and how she could not see what was important to her (her child) and demonstrated misplaced priorities:

Like she's like leaving her stuff with her, like leaving what's behind and like focusing on social media...her like other friends. Like people that unknown to her, or like people that are known and then leaving her child alone.

Zena highlighted the feeling of loneliness experienced by the child in the cartoon, thereby exhibiting an ability to empathise with the child's plight. Zena (Student Interview with Zena, 2022, lines 16-17) explained how the "child like, feels like lonely. Like she's leaving. Like what's...what, like, behind what she likes and like what she loves." Zena's (Student Interview with Zena, 2022, lines 16-17) ability to recognise the child's perspective in the cartoon is heightened by the emotive language she used to articulate this, as revealed by the words "lonely", "leaving" and "love". Furthermore, Zena's (Student Interview with Zena, 2022, lines 19-20) response reveals an understanding about the possible consequences that arise from a mother abandoning her parental responsibilities in favour of her phone through the description, "she just like talks like continuously walking and her child can easily get kidnapped." Curiously, Zena (Student Interview with Zena, 2022, lines 22-23) described the text as a "life living poem." When asked to explain this turn of phrase, Zena acknowledged the poetic language used in the cartoon and how it resembled the poems she studied in her English class that term. Although this study encouraged teachers to experiment with poetry to aid their teaching of critical reflection, Violet also made a concerted effort to draw cross-curricula connections between similar text types and skills that her Year 8 students were studying in their other subjects throughout the term, a hallmark of purposeful, connected, and quality teaching. (QTM, NSWDOE, 2024).

Zena was familiar with this text type through its vivid description of the mother-child relationship and saw this multimodal text as being 'poem-like'. Zena (Student Interview with Zena, 2022, lines 29-30) elaborated on this to state how poems akin to this are "bringing us, like people... like outside the world getting closer and being aware of what we're doing." The poetic description offered by Leunig's (2019) cartoon is accessible and familiar to this student because of the lyrical

nature of its language. Poetic description is imagined as a window to experience here, as the student sees it as a relatable medium that is helping them make sense of the content of the cartoon and the perspectives presented by Leunig (2019). Furthermore, the student acknowledges how the text is connected to a potentially real-world scenario that has the capacity to educate and influence people's worldview about technology and parenting. By using first-person pronouns like "us" and "we're", Zena (Student Interview with Zena, 2022, lines 29-30) actively reflected about the perspectives being communicated in the cartoon and their capacity to teach individuals about life. This reflection turned to critical thinking when Zena (Student Interview with Zena, 2022, line 30) stated how the poem helped audiences to [be] "aware of what we're doing", thereby demonstrating her understanding of actions versus reactions when considering an individual's responsible use of technology.

5.10 Chapter Conclusion

This chapter has presented the main findings from Phase Two of the study. As teaching began on the critically reflective units in Year 8 English and Geography, students were exposed to 4Cs teaching processes and stimuli that supported them to think critically about the content and their learning, and in various instances, practise critical reflection. Chapter Six will present the findings from Phase Three, the final phase of the study. Phase Three concluded the study with the final round of teacher interviews, offering another opportunity for reflection and critical consideration of how effectively students critically reflected during teaching and learning in their respective classes. This chapter will explore these findings and discuss the overarching themes that emerged.

Chapter Six: Phase Three Findings

6.1 Chapter Introduction

This chapter details the final phase of the study and its findings. To begin, the found poem titled *Critical reflections, Connections, and the Ticking Clock* is presented to readers as a reflective piece that combines the contemplations from teachers as they participated in the final interviews in this study. These interviews took place once teaching had concluded on the units across both Year 8 classes and offered the teachers a chance to consider whether they were successful in teaching critical reflection. An overview of the qualitative interview data is then presented and explained for the reader. The seven superordinate themes that emerged from Phase Three of the study are then discussed and appraised using quotes from the final interviews with the teacher participants.

6.2 Critical reflections, Connections, and the Ticking Clock

Creative flow- love that!

Maybe try [*and*] attempt new things – [*the*] power of trying

over and over again

really takes time [*to*]

make a connection – those relationships

that confidence in the kids

collaborations

Surprised!

[*because they*] weren't very cohesive

trust in the classroom – build their skills in collaboration

importance of building those connections [*in*] the earlier years [*and*]

trying processes [*they*] hadn't tried before – feeling confident to do that shows

Agency – a bigger picture

[*I was*] worried about **time**

Be creative- opportunities to sometimes play

“Okay, listen up, we're on our toes here!”

[*I want you to*] notice assumptions- whose voice?

The words that she'd chosen [*had*] a lot of meaning – articulate and detailed

Critical reflection [*is*] deliberate and intentional, [*it's*]

digging in deeper [*and*] allowing that moment of disorientation

challenging them to be uncomfortable – [*a*] deeper interrogation

actively seeking out feedback demonstrated that they had critically reflected,

[that they were] having their voices heard.

[it's] provocative *[and]* enjoyable *[to
see them]* unravel perspective as a concept.

And by the end of it, what I think Marcus was most proud of is the fact that

they were able to sort of... “dig themselves out of it.”

This chapter opens with a found poem crafted from the quotes showcased in Master table C, which details the superordinate themes that arose from the teacher participants final interviews in the study. The process of creating this poem was deeply reflective, as I first decided which words/phrases from the table stood out for inclusion in this poem based on the research questions and the notable teacher experiences that took place. The poem begins with a statement about creative flow, which is a nod to the creative process that has taken place throughout this study as teachers and students found ways to explore and practise critical reflection using a 4Cs approach. To maintain the structural flow within the body of the poem, I chose to include additional bracketed words and phrases in italics (typically articles (e.g. *the*), prepositions (e.g. *to*), and conjunctions (e.g. *and*) that also linked the dialogue together in a way that communicated key ideas and teachers' experiences coherently.

The word “time” that is made salient using boldface at the start of the second stanza is emblematic of the many challenges encountered both within this research study and those surrounding the complexities of teaching capabilities like critical reflection, whilst balancing the teaching content and skills. This study began as a battle against time, especially as it was conceived and executed during the height of the COVID-19 pandemic, which added additional logistical and administrative complexities to conducting school-based research. As a researcher, the process of consulting prospective schools and sourcing teacher participants willing to join this study in such a tumultuous time when they had just returned from a long and unexpected period of remote teaching during 2021 was extremely challenging. Both the teachers and students who undertook this study returned to a classroom landscape that had been dramatically altered by the effects of the pandemic, and the social and emotional impact of this period heavily influenced how these teachers catered

to the changing needs of their students and their educative role. Teacher participants were conscious of time in this regard, and this was discussed in conversations about gaps in student learning that developed because of the limitations of remote teaching. Conversely, the trajectory of the study also placed time limitations on teacher participants to plan and deliver a unit of work with a focus on critically reflective learning within a period of four weeks. This was at the forefront of the teacher participants' mind, as the teaching of critical reflection cannot be rushed and must be nurtured for it to be successful. Despite these limitations, there was ample time for reflection throughout this study, which I pay homage to through this found poem, as it captures the final reflections of teachers as they contemplate their individual and collective experiences.

Phase Three of the study served as an opportunity for reflection between myself and teacher participants, as we revisited their experiences of fostering critically reflective teaching and learning opportunities for their respective Year 8 classes. My decision to include a final interviews phase (Phase Three) offered participants a moment of introspection and an opportunity to critically reflect on their practice, more specifically:

- whether they felt they were able to teach critical reflection
- to what extent they believed critical reflection was present in their classrooms
- and how they experimented with poetry to facilitate critical reflection throughout their unit

The data that resulted from these interviews allowed me to address my research question, as well as respond to sub-question a: What are the experiences of Stage 4 students and educators involved in teaching and learning that seeks to foster critical reflection? This final round of interviews also tied purposefully into teachers' professional learning as 4Cs educators, as I presented this time as a chance for teachers to reflect on their understanding of the how the 4Cs work together to create an environment for critical reflection to occur. Although many participants chose to debrief with me at multiple intervals throughout Phase Two of the study when lesson observations occurred, the final interviews captured a holistic view of each participant's experience across all three phases of the study.

Four interviews were conducted with Marcus, Dominique, Jeremy, and Violet respectively, once teachers had completed teaching on their units. Final interviews took place on Zoom at the end of the term and were recorded and transcribed by the researcher using a software program called Descript (2024). All interview data was analysed using IPA in the same fashion as the initial

interviews. This process will be summarised briefly as follows. Interview transcripts were coded through the process of initial noting to produce emergent themes, which were then clustered using colour-coding into emergent theme groups (see Figure 6.1). The emergent themes groups were translated into superordinate themes, which were coded according to their value and relevance to the research question. Superordinate themes were then tabulated and assigned at least two examples from the transcript (see Figure 6.2).

Figure 6.1

Emergent theme clusters (colour-coded) from Dominique's final interview transcript

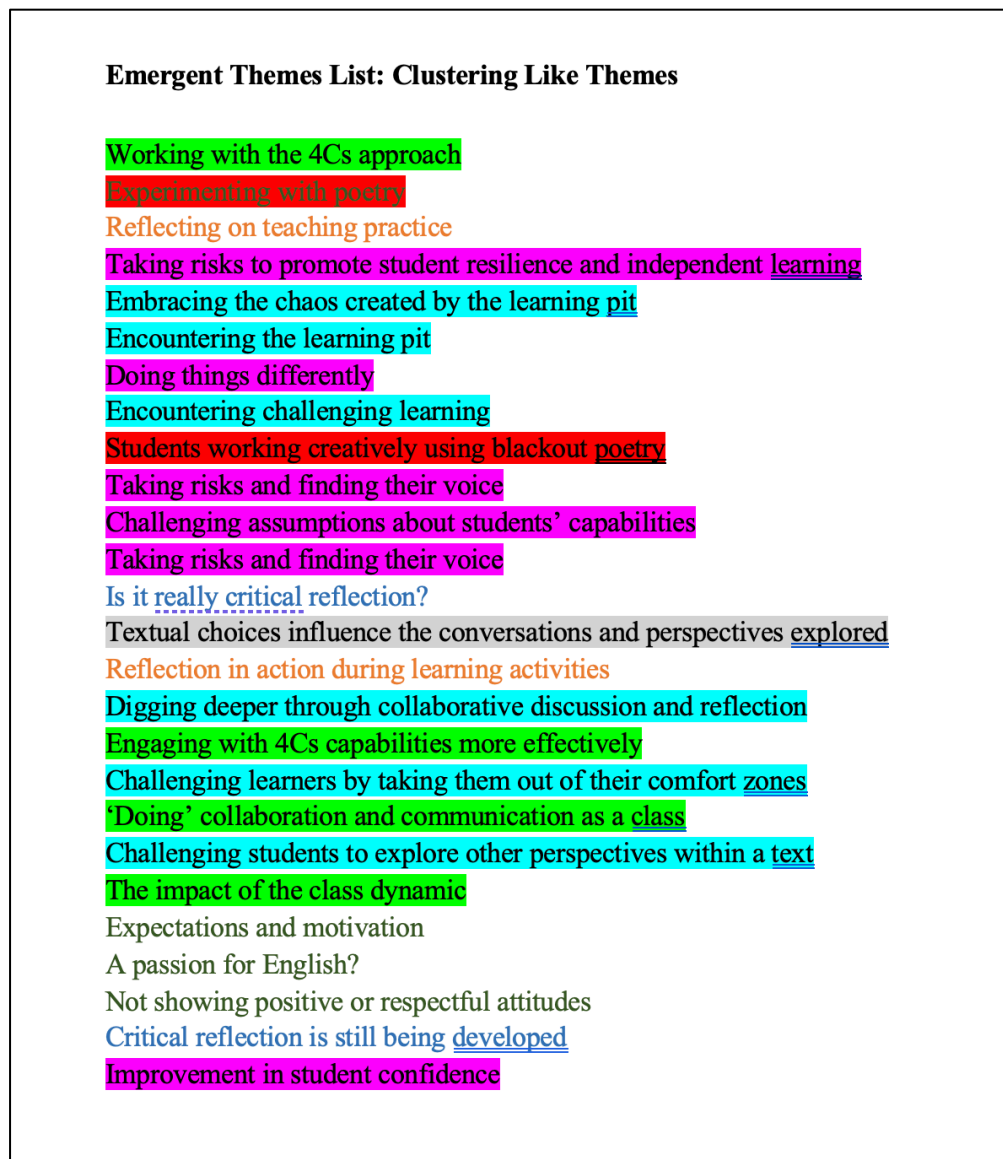


Figure 6.2

A section of the Table of Superordinate Themes for Dominique's Final Interview

Table of Superordinate Themes from Dominique's Final Interview in the Study		
Superordinate and Subordinate Themes	Page/line	Quote
Working with the 4Cs approach Engaging with 4Cs capabilities more effectively 'Doing' collaboration and communication as a <u>class</u> The impact of the class dynamic Usefulness in the level of collaboration built-into 4Cs <u>processes</u> Evidence of increased confidence and quality of student work Building competence with a 4Cs process as a class enhances students' learning <u>experience</u> Confidence is achieved through repetition of a 4Cs <u>process</u>	7.218 7.225-26 7.240-41 8.259 8.269 14.467-68 14.476-77	which was 'me, you' and then '21', and they did it so much <u>better</u> We got to number four or five when you were there, which says a lot about the <u>kids</u> what an interesting reflection that there just seems to be with this class, this real divide of the boys versus the girls I think that that level of collaboration will make a massive <u>difference</u> it was articulate and detailed and feeling confident to do that definitely shows <u>agency</u> after a few months of working through it, that idea that it's that shortcut, that the kids know exactly what is <u>expected</u> having done it <u>over and over again</u> , it's polished to the point where the students can really <u>reflect deeply</u>
Poetry and creativity Experimenting with poetry Students working creatively using blackout <u>poetry</u> Don't pass on opportunities to be <u>creative</u>	2.63-64 4.121-122 13.456-57	<u>So</u> Marcus was happy to experiment with that with our class there was a lot of meaning there in the words that she'd <u>chosen</u> I pass up opportunities sometimes to play with my classes and be creative because I'm worried about time
The road to critical reflection Reflecting on teaching practice Reflection in action during learning activities More time spent on <u>reflection</u> Is it <u>really critical</u> reflection? Critical reflection is still being <u>developed</u>	3.83-84 6.199-200 9.286-97 5.158 8.250	I tend to give the students too much right at the beginning. <u>So</u> I help them too much a really good lesson at them reflecting on... their assumptions on what they bring to <u>texts</u> the blackout poetry and the 'Man from Snowy River', I would've liked each of those to run for three <u>lessons</u> I think the ability to work in groups sort of really helped <u>too</u> I do feel there's still a way to go with that class
How do you build a culture of sharing and confidence in a school? Student-teacher relationships are <u>important</u> Relational work helps teachers to challenge and engage students in their learning	9.308 10-336-38 10.344	a lot of the kids at this school will say, "don't read out my answer. I'll write <u>it</u> I know which kids have... which kids in that class have more confidence or have a bit of power over the other kids in the <u>room</u> I've got a really good rapport with them and a good relationship with them

Note. This figure only shows the first four superordinate themes in this table of superordinate themes from Dominique's final interview. The complete table can be found in Appendix E.

The superordinate themes that were derived from each interview transcript were tabulated and colour-coded (see Figure 6.3) to form the third master table (Master Table C) of superordinate themes (see Figure 6.4), which represented the final seven superordinate themes that were recurrent across two or more interview transcripts. New superordinate theme titles were formed during this process and at least two quotes from each transcript were included to evidence these seven themes.

The seven superordinate themes that were found in the final interview phase of the study, as featured in Master Table C are listed below:

1. Teaching and learning within the 4Cs approach
2. The impact of collaboration on the meaning-making process
3. Experimenting with poetry as a creative tool for critical reflection
4. The road to critical reflection
5. Shaping curriculum content through multiple perspectives, narratives and voices
6. Letting your stimulus be powerful: Using provocations
7. Entering The Learning Pit: Deep learning

Figure 6.3

A table that identifies (using colour-coding) cross-interview superordinate themes in Phase Three

Process of identifying cross-interview superordinate themes			
Jeremy	Dominique	Violet	Marcus
<p>Experiences with the 4Cs approach Inexperience with the 4Cs approach Testing out 4Cs processes Hesitancy around 4Cs processes</p> <p>Collaboration and the meaning-making process</p> <p>Using poetry to critically reflect Using poetry as a tool was challenging</p> <p>Evaluating gaps in student learning</p> <p>Developing independent writers through reflection Developing autonomy as writers Reflecting on the writing process Fostering collaborative writing and discussion Engaging with the writing process Progressing to independent writing</p> <p>Fostering grit</p> <p>Developing critical reflection skills Challenges with critically reflection</p>	<p>Working with the 4Cs approach Engaging with 4Cs capabilities more effectively 'Doing' collaboration and communication as a class The impact of the class dynamic Usefulness in the level of collaboration built-into 4Cs processes Evidence of increased confidence and quality of student work Building competence with a 4Cs process as a class enhances students' learning experience Confidence is achieved through repetition of a 4Cs process</p> <p>Poetry and creativity Experimenting with poetry Students working creatively using blackout poetry Don't pass on opportunities to be creative</p> <p>The road to critical reflection Reflecting on teaching practice Reflection in action during learning activities More time spent on reflection Is it really critical reflection? Critical reflection is still being developed</p>	<p>Student engagement and receptiveness towards the 4Cs approach Surprising level of student engagement Playfulness of the lessons Positive receptiveness to the 4Cs Engagement and fun when using the 4Cs processes during learning</p> <p>Good sense of teamwork and group dynamic Growing sense of collaboration and teamwork stems from student engagement in the 4Cs processes Visually representing the reflective process through 4Cs processes Exposing students to lived experience is valuable</p> <p>Teaching holistically through the lens of critical reflection Explicit, focused teaching Forced to think laterally and look for connections to critical reflection in the content Critical reflection was at the forefront of teaching The dichotomy of structure vs openness when teaching a lesson that fosters critical reflection</p>	<p>Being a confident collaborator Building collaborative learners takes time Teamwork and consistency Gaps in student learning 'Collaborating well' Slowing down the learning to build collaboration Developing class cohesion It's about trust and relationships</p> <p>Teaching critical reflection Applying a metacognitive lens to intuitive teaching practices Intuitive elements to critically reflective teaching</p> <p>Accessing higher order thinking in Stage 4 Digging into questioning prompts Deep thinking Not enough time to critically question texts Moving from the 'what' to the 'how' Finding the meaning- connecting to purpose and ideas Conceptual thinking is challenging Moving beyond literal meaning From the literal to the conceptual Challenging students to think Asking critical questions to stimulate reflection</p>

Figure 6.4

A section of Master Table C evidencing the seven superordinate themes found in Phase Three

Master Table C: Participants' Final Interviews (Phase 3)								
Superordinate Themes	Jeremy		Marcus		Dominique		Violet	
	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.
Teaching and learning within the 4Cs approach Experiences with the 4Cs approach Working with the 4Cs approach Student engagement and receptiveness towards the 4Cs approach The possibility of building 4Cs capabilities with younger cohorts	trying processes that I hadn't necessarily tried before	2.35	it's the importance of building those connections and that confidence in the kids	9.309-10	it was articulate and detailed and feeling confident to do that definitely shows <u>agency</u>	8.269	that surprised me a bit because we do a lot of that in regular classes	1.18-19
	I think it was good for me to maybe try and attempt some new things	2.32	I think that's the power of trying to do it in year seven and eight and get those relationships and collaborations working in those earlier years	9.296-97	having done it over and over again, it's polished to the point where the students can really reflect deeply	14.476-77	enjoyable and positive receptiveness to the word 4Cs	1.16
The impact of collaboration on the meaning-making process Collaboration and the meaning-making process Good sense of teamwork and group dynamic Being a confident collaborator	they were able to make a connection with Indigenous Australia	10.308	build their skills in collaboration...And it really takes time to do that	2.61-63			I think they have a, a sense of a team and a group that is really <u>lovely</u>	3.71
			they were quiet...they weren't very cohesive in that eight five class	8.270-271			that's built by process when it's like process that makes it, um, uh, more seamless to collaborate	3.75-76
Experimenting with poetry as a creative tool for critical reflection Using poetry to critically reflect Poetry and creativity	I'm not sure that the students particularly used poetry for critical reflection	2.41	they love that, that put them in a much more creative flow	12.399	there was a lot of meaning there in the words that she'd chosen	4.121-122	I think for some of my kids who really struggled, chose an acrostic poem	5.160-61

Note. This figure only shows a section of Master Table C, which details the first three superordinate themes that were found in Phase Three of this study. Seven superordinate themes were found and represented in Master Table C, which can be found in Appendix F.

6.3 Teaching and Learning within the 4Cs Approach

Working within a 4Cs approach can be both exciting and daunting for teachers. However, teaching within an Australian education system that is geared towards student academic growth and attainment has created a culture of fear around such transformative teaching practices due to the risk of failure. Jefferson and Anderson's (2017, 2021a) 4Cs approach offers teachers, students, and school leaders a framework for school transformation that warrants time, patience, and effort to nurture effectively. As a leader of school transformation at Moonstone HS, Marcus offered a unique perspective about the successes and challenges faced by his school as he worked to bring students and teachers on board with this change.

A consistent challenge that Marcus faced in his leadership role when supporting teachers with their adoption of 4Cs practice is the fear and risk that comes with failure. Marcus noted how many of the high potential learners at Moonstone HS become complacent and do not wish to be overly challenged in their learning, whilst some teachers feel that if their students cannot meet this challenge with support and then experience failure, this is a direct reflection of their teaching.

We think it reflects on us if they're failing or they're not getting As and Bs, that must be something we are doing wrong. So that's an ongoing, I guess, support in a leadership role to keep on supporting the teachers that yeah, someone's gonna fail and that's okay.
(Interview with Marcus, 2022, lines 32-35)

Moonstone HS had been working with the 4Cs for four years at the time of this study to adopt and spread 4Cs practice at a whole-school and classroom level. Marcus explained how in the initial stages, teachers or 'early adopters' of the 4Cs approach began putting structures in place across the high school to help spread their practice. More recently, the 4Cs have been embedded

into whole-school planning, for example, in the school's implementation of the NSW Department of Education's (2021) new High Potential and Gifted Education [HPGE] policy, which Marcus spearheaded through staff and executive meetings. Marcus describes how 4Cs practices fit quite seamlessly into other programs throughout the school, including wellbeing programs, like Year 7 peer support, and suspension resolution meetings with students. In one case, Marcus explained how the school's deputy principals all refer to the LDW (which they have visibly printed on their desks) to help students reflect on their behaviour and put forward an action plan for positive change and improvement using this language.

Cohorts of teachers and school leaders at Moonstone HS received ten training sessions each from the 4Cs Transformative Learning team, which helped them to understand and spread the practice. When the COVID-19 pandemic hit NSW schools in 2020, Marcus explained that across 2020 to 2021 at least three to four cohorts of teachers undertook the training. When NSW schools were forced to transition to remote learning because of the COVID-19 lockdowns that occurred in Local Government Areas across NSW during mid-2021, this training slowed and was modified due to the limitations of remote learning, as the 4Cs approach relies on embodied learning practices which are not as easily transferable to an online learning context. At the end of 2020, Moonstone HS conducted a large-scale situational analysis which documented what students noticed about the school having newly adopted the 4Cs approach. Marcus (Interview with Marcus, 2022, line 97) stated that the data revealed that "we'd [teachers] been kind of talking about 4Cs, but not necessarily embedding it so much." Another steppingstone to implementing 4Cs practise on a whole-school level was ensuring that teachers understood that the 4Cs was as much about embodied learning practices to teach these four capabilities (critical reflection, creativity, collaboration, and communication) as it was about

reflective practice; a way of thinking deeply and purposefully about what educators do in their classrooms.

Dominique saw collaboration and effective communication between her Year 8 English students as a marker of success when engaging with the 4Cs during this study. Dominique felt that her English students engaged more effectively in their analytical and conceptual writing because of their work with the 4Cs, particularly their ability to work collaboratively and communicate more effectively as a team. During the period of remote learning in 2021, this student cohort was initially introduced to the concept of PEEL paragraph writing in English with varied success and engagement. Dominique (Final Interview with Dominique, 2022, lines 160-163) reflected on this below:

I tried to do PEEL paragraphs with them last Year when they were in Year seven, but we were doing it during COVID and lockdown, so they didn't really have that, that communication and that collaboration that made a massive difference this time around.

During the study, students became more adept with formulating their own concept statements around the poetry texts being analysed and translating their understanding into PEEL paragraphs in groups. During the study, Dominique, Marcus, and Jeremy all professed that this English class had not, in the words of Dominique, (Final Interview with Dominique, 2022, line 227) “gelled very well together.” Dominique believed this to be partly due to the impact of a prolonged period of remote learning and a perceived gender imbalance in the classroom that made it more challenging for female student voices to be acknowledged and their efforts valued. Although students had clearly worked more effectively as a team after the study concluded, Dominique continued to push students out of their comfort zones to support their growth as ‘good collaborators’. In one lesson, Dominique ran the same activities that she and

Marcus had run during a lesson that I had observed throughout the study focusing on the 4Cs processes ‘Me, You’ and ‘21’. Notably, Dominique observed that students performed far better than last time but still required encouragement to develop their confidence and willingness to work with others.

I did say to them ‘you have to pick somebody that you haven’t picked before, or you have to pick someone of a different gender.’ I was just trying to get them outta their comfort zone because the boys would pick boys, girls pick girls, and we got from one to 21 first go. (Final Interview with Dominique, 2022, lines 220-223)

Dominique highlights another example where Jeremy had asked the class to write some statements in response to the poem *The Man from Snowy River* (Paterson, 2008/1890), and a female student received criticism from the male students in the class for posting her response on Google Classroom. Dominique (Final Interview with Dominique, 2022, lines 237-242) recounted this below:

One of the girls had written this brilliant statement on there that was like three or four sentences. And the kids underneath, all the boys in the class had written “cringe, cringe, cringe” as the comment underneath. I just deleted it all. And then I said, “great comment” to the girl, but I thought... what an interesting reflection that there just seems to be with this class, this real divide of the boys versus the girls. And when the girls put heaps effort in, the boys are saying, “oh cringe, oh you’re a suck up, you’re a teacher’s pet”.

This example highlights just how impactful the class dynamic can be on the learning environment that is created for students, especially in a co-educational government school. By adopting the 4Cs as a tool for transformation, Dominique attempted to educate her students about how to work with other genders and communicate effectively in online learning

platforms like Google Classroom, therefore teaching them important life skills that they will use beyond the classroom. Although Dominique found this classroom dynamic to be unusual for a ‘top’ English class, she persisted and observed that students had ultimately benefited from an increased effort to help them collaborate in their journey to critically reflective learning throughout this study.

6.4 The Impact of Collaboration on the Meaning-making Process

The impact of collaboration on critically reflective learning results in reflection that is far more holistic in its approach, so that there is a concerted effort to understand the ‘big picture’ and the learner’s position within this (Jefferson & Anderson, 2017, p. 95). Whilst critical reflection must begin as an individual exercise so that students can learn to identify and articulate their assumptions, the process of questioning, and then contesting, evaluating, and adapting this knowledge can only occur when they collaborate with others. It is this process of sharing their assumptions and being exposed to another’s perspective that allows learners to become aware of the gaps in their knowledge and take steps to fill these gaps through critical reflection. Ultimately, critically reflective learning that is co-constructed amongst learners tends to be more effective and memorable because of the collaborative nature of this knowledge creation.

The students in Violet’s Geography class showcase how critical reflection can work effectively when students are taught how to be effective collaborators that share and build new knowledge together. Violet believed that her students worked well throughout this study, even surprising her with their engagement and excitement at trying 4Cs processes in their quest to critically reflect. In her final interview, Violet (Final Interview with Violet, 2022, lines 71-74) recalled how students worked as a team throughout her lessons.

I think they have a, a sense of a team and a group that is really lovely. Where across the room they can, um, you know, if we are trading ideas across the room, you know, you can send kids across the classroom and say “trade two for two.” And I think there is a sense of, um, there’s been a growing sense of collaboration, teamwork there, which is cool. (Final Interview with Violet, 2022, lines 71-74)

Violet (Final Interview with Violet 2022, line 74) attributes her students’ “growing sense of collaboration” to the nature of the 4Cs processes themselves, as they bring an element of creativity, playfulness, and spontaneity to each learning activity. For Violet, it is the use of each 4Cs process that makes collaboration feel more seamless in this instance, as the students are engaged and feel comfortable learning through each 4Cs process as part of a group. Whilst the 4Cs processes are curated to foster a sense of collaboration between learners, the relational work that Violet undertook to bring her students to a point where they felt safe, valued, and part of a learning community is equally important. As Marcus (Interview with Marcus, 2022, lines 274-277) stated in his interview:

it’s about the relationships with the teachers...it’s about actually building those relationships in a classroom so you can learn together as a team...when you’ve got those relationships...that trust in the classroom and all those things work more effectively.

This was highlighted through the language that Violet used when referring to students, both in her classroom and during the interviews we completed throughout the study. For Violet (Initial Interview with Violet, 2022), her learners were not merely ‘students’ but “geographers” (line 377) and “global citizens” (line 192). Violet’s language is inclusive and instructive because it inspires a sense of purpose and community amongst her students, which helps to set a positive tone for the learning that takes place in her classroom. During my observations, it was clear

that Violet's classroom was a place that most students felt welcomed and were genuinely happy to be a part of, and this directly translated into an increased desire for students to participate in learning activities alongside their peers and teacher.

Marcus observed that Violet was able to make greater strides in her students' ability to critically reflect because of their skills in collaboration and the consistency in teaching that was delivered. As opposed to the Year 8 English class where teaching was shared between Dominique and Jeremy on a fortnightly basis, Violet was fortunate to have more time to get to know her students as a group and had taught them consistently since Year 7. In her initial interview before the study began, Dominique (Interview with Dominique, 2022, line 56) had confessed that although she knew her Year 8 students well, she felt that she did not have enough consistent teaching time with this English class throughout the duration of the study to monitor their progress because she was only timetabled to teach them once a fortnight. Although Violet was more proficient in her knowledge and delivery of 4Cs practice at Moonstone HS because of her exposure to the approach during her university studies, the determining factor of success with critical reflection in her classroom was the relational groundwork that she cemented for students to be able to work collaboratively and communicate their reflection with growing confidence. As Marcus (Interview with Marcus, 2022, lines 61-64) confirmed,

she [Violet] managed to build their skills in collaboration and build their skills in working together as a team. And it really takes time to do that. But you could see that, that, you know, has great dividends in their ability to work together.

Contrastingly, the Year 8 English class had starker gaps in their collaborative learning that made it more challenging for Marcus, Dominique, and Jeremy to foster critical reflection amongst

this group. Marcus (Interview with Marcus, 2022, lines 64-70) described his experiences of working with this class below:

They didn't know each other's names. They didn't, they weren't willing to collaborate with each other well, and when I put them together and did the, um, some stuff in butcher's paper and stuff they did reflect and say that they got to deeper understanding and the strategies were working for them. They were able to identify that, but it took much more time to get there because we hadn't built that groundwork of the collaboration in order to work together as a team. So that was very interesting.

Upon reflection, Marcus (Interview with Marcus, 2022, line 122) felt that the concept of “slow[ing] down the learning” to develop collaborative relationships with students had not been effectively filtered down to every teacher at Moonstone HS. The capacity for critical reflection to work powerfully and have transformative impacts on student learning can only be achieved when student collaboration is instigated and nurtured at the beginning of their high school journey. As Marcus (Interview with Marcus, 2022, lines 296-298) concludes,

I think that's the power of trying to do it in Year seven and eight and get those relationships and collaborations working in those earlier years, because by the time you get to Year 10, you know, unless you've got quite confident learners...

Marcus signaled to me in this moment just how challenging it was to work with older student cohorts who struggled to collaborate effectively. This was especially evident with students in Stage 5⁵ (Year 9 and 10) and Stage 6 (Year 11 and 12), who had not completed enough of the groundwork in 4Cs practice to understand and display interpersonal competencies on the LDW

⁵ In Australian secondary schools, 'Stage 5' refers to the middle two years of schooling before students become seniors, namely, Year 9 and 10.

that enabled collaboration, including teamwork, empathy, and influence. This groundwork is essential for students to engage with the four main capabilities effectively. Ultimately, without a disposition for learning that fosters collaboration, critical reflection cannot occur.

6.5 Experimenting with Poetry as a Creative Tool for Critical Reflection

Phase Three of the study offered an opportunity for teacher participants to explore how critical reflection could be imagined creatively using poetry both as a stimulus to provoke critical reflection and a creative medium for articulating one's reflection. More specifically, this phase of the study responded to the third research sub question: How can poetry be used as a creative tool to facilitate critical reflection during teaching and learning?

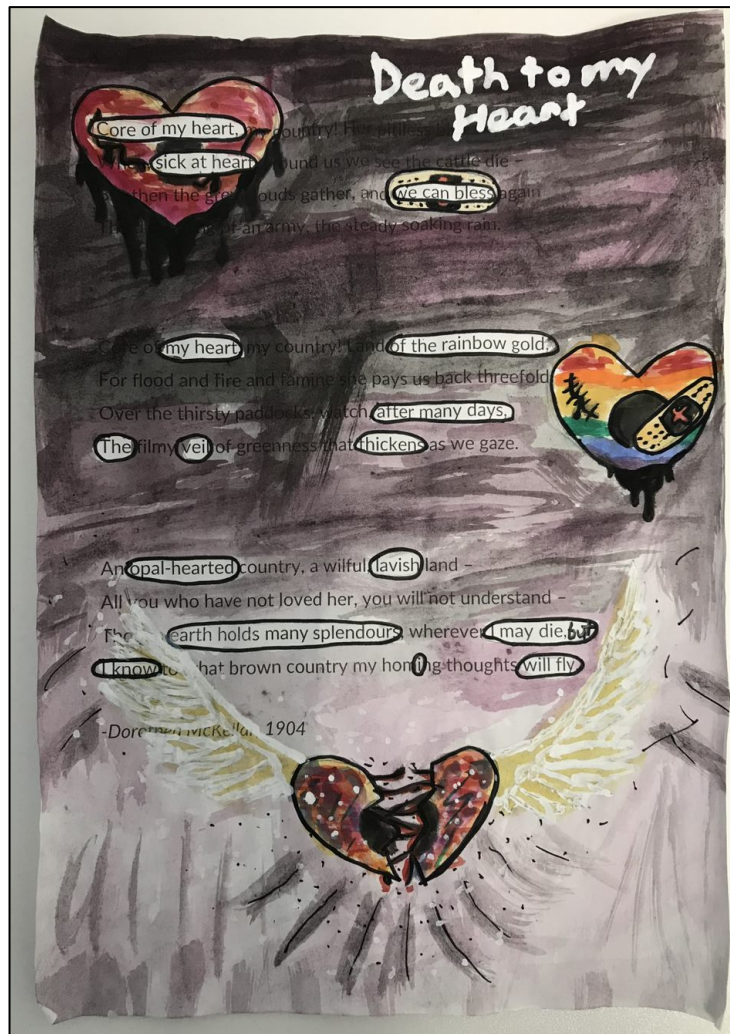
There were mixed results from each Year 8 class when using poetry to critically reflect in this study. Firstly, Jeremy felt unsure that he consciously used poetry as a tool for critical reflection during this study. Jeremy believed that although the Year 8 English unit was already a poetry-focused unit based on the concept of Australian identity, he was not consciously using poetry to stimulate critical reflection in his classroom. Since Jeremy was the teacher participant with the least 4Cs training, his objectives coming into this research differed slightly from the other research participants and consequently shaped his experiences. Jeremy was able to trial 4Cs processes like 'speaking into the void' with his class and begin to capitalise on opportunities for his students to think critically about the poems they were studying. Significantly, the study became an opportunity for Jeremy to extend his learning of the 4Cs approach and understand more about critical reflection, its theoretical and pedagogical underpinnings, and how it could be implemented in teaching and learning.

Contrastingly, Dominique spoke about her efforts to help students experiment with blackout poetry alongside Marcus at the beginning of the study. Although Dominique had not previously done a lot of work with blackout poetry in her English classroom, she was excited to collaborate with Marcus to ‘play around’ with this poetic form and see what resulted. Notably, one of the blackout poems (see Figure 6.5) that was produced struck a chord with Dominique because of the diligence displayed by the student as they crafted the words and illustrations for their poem, which distinctively used watercolour paint instead of coloured pencils. This poem titled, *Death to my Heart*, uses symbolism and vivid watercolours to create something unique and personal from the poem *My Country* (Mackellar, 2021/1908), which was used as a template for the new poem. Dominique (Final Interview with Dominique, 2022, lines 112-115, 117, 121-122) notes how the student took the time to craft their watercolour poem, *Death to my Heart*, below:

I think that the best example that we ended up showing you. The girl in the class who I knew was really creative, had taken it [the poem] away and she’d had that time to think about it and work on it. And she’d come up with the... I think I took the photo of it, the really beautiful example...Yeah, it was a watercolour one that had the heart...So, she’d taken the time to do that. And I, there was a lot of meaning there in the words that she’d chosen.

Figure 6.5

The Year 8 English watercolour poem titled 'Death to my Heart'



This thoughtfully crafted blackout poem (see Figure 6.5) is a product of the transformative learning that took place in Jeremy, Dominique, and Marcus' English class. The transformative nature of this student work sample is revealed through the art of crafting blackout poetry and the creative and cognitive process that the learner must undertake. Students were asked to take the words of Mackellar's (2021/1908) original text which they had read, analysed, and reflected upon, to then craft their own text by highlighting words/phrases that allow them to express a new message about their Australian identity. By creating a blackout poem, students were taught to become aware of the transformative power of language and illustrations in conveying their own personal message and creating new meaning. Experimenting with blackout poetry with

her class was a challenge for Dominique, yet one that she embraced with fruitful results. Dominique reflected on her ability to foster creativity in her classroom, expressing how working alongside Marcus taught her to embrace moments of creativity and play. This is captured in her reflection, “And so, for me, I sort of miss... I pass up opportunities sometimes to play with my classes and be creative because I’m worried about time, I guess, or, or me looking like an idiot, or being disorganised” (Final Interview with Dominique, 2022, lines 455-457). The blackout poetry put students into a much more “creative flow”, as Marcus (Interview with Marcus, 2022, line 399) described. The prior learning that Year 8 students had previously completed on the Creativity Cascade coherence maker meant that they could engage in a playful moment of text creation that was agentic, as it offered them, as English students, the chance to be the composer and take ownership of their composition.

An important part of the critical reflection process involves the critical thinking that initially takes place to help students question and evaluate the information presented to them. During critical thinking, students identify and analyse their assumptions, actions, and/or experiences, which paves the way for critical reflection (ACARA, n.d.). Marcus felt that the process of creating blackout poetry to begin the unit helped this class to think critically about poetry as a textual form. Rather than feeding this knowledge to them in a traditional way, for example, through ‘Chalk and Talk’⁶ learning, the creation of blackout poems facilitated a space for students to learn about how poets choose language meaningfully to compose their texts. Both Dominique and Marcus noticed the level of enjoyment that students presented towards creating their own blackout poems, which helped to cement this as a fun and meaningful learning

⁶ ‘Chalk and Talk’ is a learning routine where students silently consider questions, ideas or problems presented to them by the teacher and then share their thoughts collectively with their peers (Project Zero: Harvard Graduate School of Education, n.d.).

experience in this study. Marcus describes a moment during one of the English lessons where he observed student engagement in a different light since facilitating the blackout poetry lessons.

A couple of boys...there are a couple of boys from the blackout poetry who I noticed being engaged in the way that I hadn't seen before. And I've noticed that sometimes when some of the 4Cs, you know, some of our... some of our students are able to demonstrate their understanding visually when they're not able to with language and things. So, the 4Cs is able to hook into their understanding in a way, and they can demonstrate it and have... be valued for it and recognize for their understanding. So that was, that was lovely.

(Interview with Marcus, 2022, lines 500-505)

Another inlet for promoting student engagement stemmed from the type of poets chosen for inclusion in this poetry unit. Initially, Jeremy, Marcus, and Dominique spoke about beginning the unit with traditional Australian voices like Dorothea Mackellar and Banjo Paterson. There was a conscious decision to start with the poem *My Country* (Mackellar, 2021/1908) to embed a traditional conceptualisation of Australian identity, which in Marcus' opinion, helped to ease students into poetry that is rooted in historical perceptions of Australia's diverse landscape. Once students had progressed to Paterson's poem (2008/1890), *The Man from Snowy River*, they were exposed to a very traditional and masculine perception of Australian identity that explored themes of courage, bravery, grit, and strength. This also aligned with students' focus on 'grit' as a competency in the LDW that was being embedded into teaching and learning during that term. Marcus and Dominique saw this as an opportunity to lay the foundation for critical reflection by challenging students to think critically about these ideas, particularly how the male protagonist in the poem displayed grit throughout his ordeal. As the class was exposed to more contemporary and multicultural poets, the teachers noticed that there was stronger

interest and ‘buy in’ from students, particularly the male students, when the class studied songs written and performed by the Indigenous artist Baker Boy. The songs written by Darwin-born rapper Danzal Baker, more popularly known as Baker Boy, showcase the poetic nature of songwriting and rap and its ability to explore Australian identity from a uniquely multi-lingual and Indigenous perspective. Baker Boy’s songs blend both English and Yolngu Matha⁷ in a way that is fascinating and meaningful for students in this class. The lyrical narrative of Australian identity offered by Baker Boy brought an element of personal relevance and enjoyment to students’ participation in the unit and prompted critical discussions about the inclusion of the Yolngu language and its cultural significance in these songs.

In Violet’s classroom, poetry was used both as a provocation for learning and a tool for reflection on the content being studied. Violet perceived poetry and its potential for critical reflection as a spark or form of provocation that could ignite critical thinking and curiosity from her students. Violet (Final Interview with Violet, 2022, lines 135-136) remarks how, “I looked for it as, a stem or spark or trigger or, you know, one of those like prompts that could be used at the start.” This was revealed through Violet’s use of the Leunig (2019) cartoon which featured a short poem titled *Mummy was busy*. When considering how to select poetry that could spark critical reflection, Violet sought to widen her view of what typically encompasses poetry. This can be likened to what Jeremy, Dominique, and Marcus did when they decided to include songs in their poetry unit, as this text selection acknowledges song lyrics as a poetic medium. Upon reflection, Violet expressed that instead of trying to search for what she perceived as ‘canonical poems’ akin to those that she studied in high school English by writers like Lord Byron or Sylvia Plath, she included texts that were ‘poetry-like’ and adopted the

⁷ Yolngu Matha is a collective term for the languages spoken by the Aboriginal people of northeastern Arnhem land, in northern Australia.

some of the tenets of poetry such as verse, lyricism, and rhyme. For example, Violet (Final Interview with Violet, 2022, lines 144-145) would typically use songs in her teaching and considered songs to be a form of “partial poetry”, which notably helped to demystify her assumptions about the use and applicability of poetry as a teaching medium in Geography.

The cross-disciplinary nature of Violet’s unit was intriguing, as she was cognisant that her Year 8 students were concurrently studying a poetry unit in English and could transfer their knowledge and skills as readers and writers of poetry to their study of Geography. This was evidenced through Violet’s attempts to help students create poetry to reflect on their study of tourism in Bali. The writing of poetry was initially met with some groans and apprehension, or as Violet (Final Interview with Violet, 2022, line 152) playfully teased, “I can’t do poetry here as well!” However, students were willing to ‘play with poetry’ in Geography because of the way that Violet made this medium palatable for her class. Violet described how she went about introducing students to the idea of creating poems from their spectrum creation activity (see Figure 6.6). Across previous lessons, students created their own spectrum which visually represented a scale of how to be a good tourist in Bali, thereby connecting to their study of the concept of ecotourism. One end of the spectrum represented things that ‘good tourists’ do, whilst the other represented the things that tourists should avoid when travelling in Bali. Violet approached the poetry creation activity quite playfully to ease initial trepidation from students about how their poems should look and sound. Students were invited to use a poetic form that resonated most with them to write their *Bali* poem and experiment with their writing. This made the use of poetry accessible for students, as they were free to say, ‘no, this doesn’t work

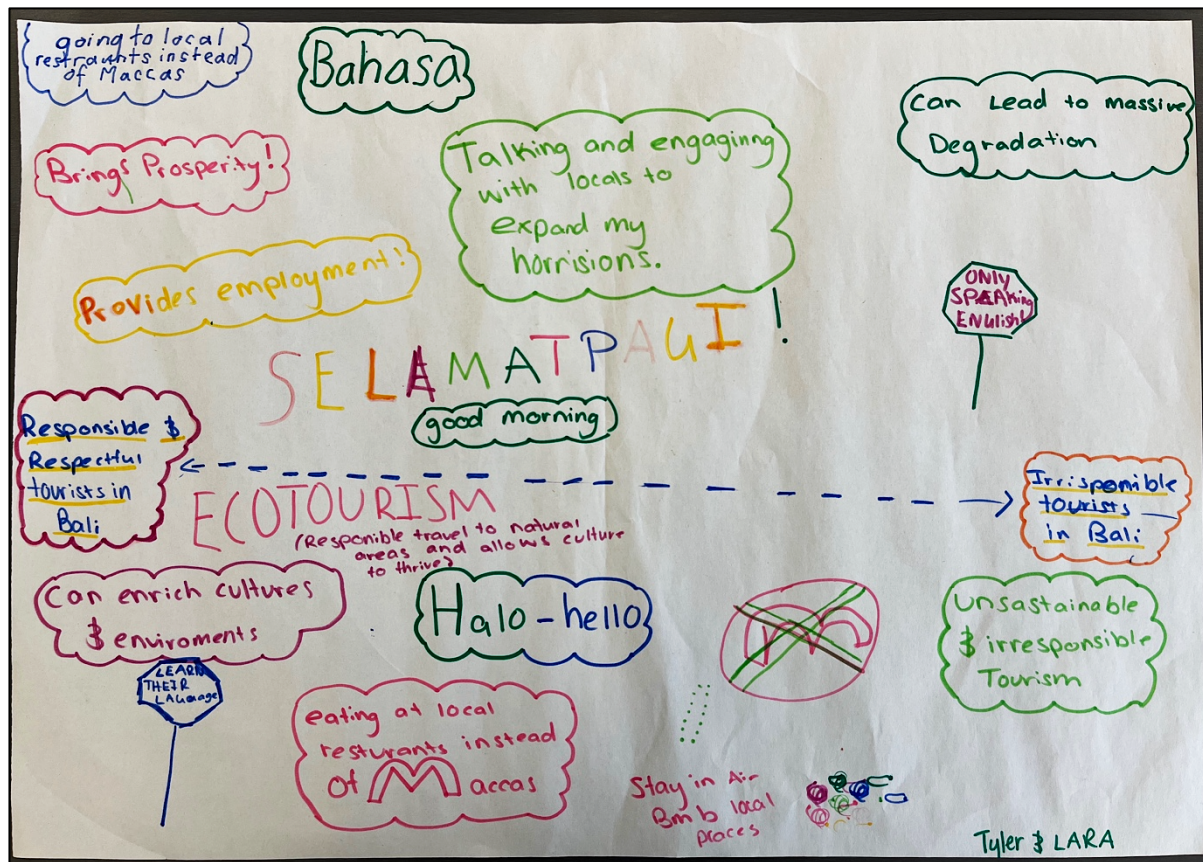
for me, I'll choose something else'. For the learners who struggled, acrostic poetry⁸ offered students an inlet into poetry writing that felt more structured than writing a free verse poem about Bali 'from scratch'. The added support of having the letters of the word to structure the acrostic poem gave students enough confidence and security to attempt the writing process independently, once this had been modelled by their teacher. Violet encouraged students to treat this exercise as if they were writing a love letter to Bali to combat writers block on the topic. When used thoughtfully, this seemingly simplistic poetic form can have very prolific results, as revealed by Violet (Final Interview with Violet, 2022, lines 173-183) below:

Some of them [students] were a bit brave and did the free verse poem. We kind of curated it together on the board, but they were also writing their own things, and that was fun. And the ones who were just generally writing like a, an acrostic were able to engage with it as well. So that was pretty cool actually, as a, that's a reflection in itself, like it really is. They're not, that's them reflecting on. Okay. So, what, what is the action? Or what do we then suggest or pose as, a way forward when you're thinking about being a tourist in Bali? You know, so perhaps it's, it's just, I, I'm trying to remember the actual poems. But they, I think they often would just say, you know, "pollution, pollution," just listing things that are stereotypes of those things. And I'd say, "no, go back to your spectrum. Use the words on your page that we've talked about, that, that challenge that or..." and I think, yeah, that was not executed brilliantly, but it, it... was a start at using poetry to do that.

⁸ An acrostic poem is one that uses a word as the basis for a poem. "In an acrostic poem, the first letter of each line spells a word" (British Broadcasting Company [BBC] Bitesize, 2024). The chosen word then becomes the subject of the poem.

Figure 6.6

A work sample of a student's visual spectrum of ecotourism in Bali



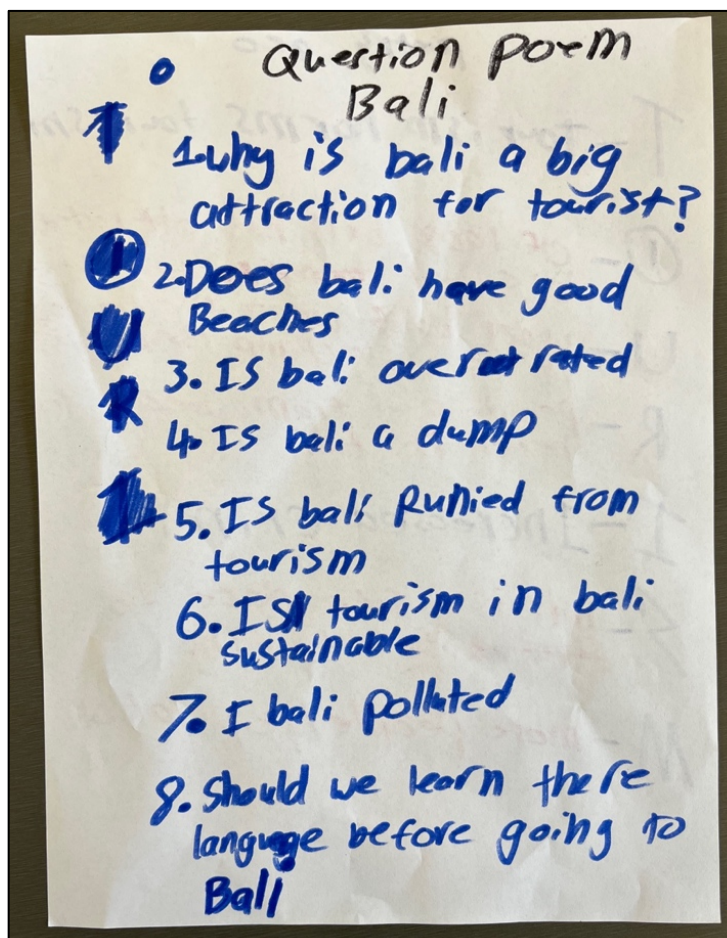
Another form of poetry that was explored by Violet and her students was question poetry⁹. In post-lesson discussions with Violet, the possibility of using a question poem to encourage students to pose and reflect on critical questions about their study of Bali was considered. Although Violet had never written a question poem before, she took it as an opportunity to exert her curiosity and experiment with her students in the moment, especially when she could see that students were struggling to write a free verse poem, or for those who needed an extra challenge.

⁹ A question poem is a “series of questions arranged poetically” (Stratford, 2024). This can take many forms, including a poem which only poses questions or one that poses and then answers its question/s.

I was able to give a little nudge to some students to say, like, “have a go at a question poem,” you know, like, well, you know, just, why not? Why not just like, and I was able to do that... the flexibility of that, uh, students writing poetry is just that they’re sitting in there kind of pondering, you know, some writing on the whiteboard, some ideas, some just, you know, they were in the kind of... they were able to apply it and try it and experiment with it, in a, quite a casual, relaxed environment. And it meant that I can go around and be one-on-one with those kids. And just say, if someone’s tried, you know, an acrostic poem who is finding it way too easy, like... or just, kind of not challenging themselves, even that was nice to be like, “it’s time for a question poem I think? What do you think?” (Final Interview with Violet, 2022, lines 206-214)

Figure 6.7

A work sample featuring a Bali question poem



When asked to consider how an acrostic poem can be used as a tool for reflection, Violet (Final Interview with Violet, 2022, line 177) posed the question, “What is the action?” Here, Violet ties the act of questioning to a tangible action or way forward for students when considering what it means to be a responsible tourist in Bali. By doing so, Violet establishes the groundwork for critically reflective learning, since the process of completing a question poem helped students to come to conclusions about the positive actions that they could take as future tourists. Another heartening aspect of Violet’s (Final Interview with Violet, 2022, line 214) approach to using poetry as a reflective medium is the agency that she offered her students by actively posing the question, “What do you think?” Violet demonstrated how agentic teaching looks and feels like in a classroom where students are given the freedom and space to be creative within certain parameters and are empowered to navigate choice with support from their teacher. Moreover, Violet was not afraid to make mistakes and take risks with her learners even though she did not have the expertise in teaching poetry that Marcus, Jeremy, and Dominique did as trained English teachers. As students began drafting their poems, Violet (Final Interview with Violet, 2022, line 181) mentioned how she facilitated this process by working one-on-one with some students, whilst ensuring that all students had a chance to “go back to [their] spectrum” and incorporate that language into their poetry to consolidate their learning. Violet (Final Interview with Violet, 2022, line 181) did this to avoid students simply defaulting to listing stereotypes like “pollution” in their poems without adequately explaining these stereotypes with examples from their spectrums.

6.6 The Road to Critical Reflection

In his final interview, Marcus was asked to reflect on what he found challenging or unexpected about his teaching and learning experiences when fostering critical reflection and observing its occurrence in the Year 8 English classroom. Marcus began by foregrounding the cognitive

demands of the Crucible for students and deliberated its functionality in different learning contexts. Marcus (Interview with Marcus, 2022, lines 228-233) states,

I wonder where it would be useful to embed the actual coherence maker? I've used the coherence maker. I've used the creativity coherence maker a lot, particularly with staff. I've used it quite a lot with students. I've used it more around, you know, planning things, and particularly like creative writing or imaginative writing. The craft of writing kind of units I've used that, um, haven't so much used the critical thinking, like the actual coherence maker. And I wonder where, how that, where that would be useful?

Marcus believed that before this study, his teaching of critical reflection was accomplished intuitively, rather than in any deliberate way. Therefore, the Crucible became a way for Marcus to label the process of teaching critical reflection. Marcus provides an example from his senior English class, where he equates the development of conceptual thinking to opportunities to foster critical reflection with this cohort. Marcus was hesitant that since conceptual thinking is readily practised in Stage 6 English and is typically an emerging skill that is introduced in Stage 4 English, students might not have the same opportunity to learn how to critically reflect. Whilst it is apparent that senior students across most subjects can access this capability more readily through the content and the high order thinking skills they are required to display at this level of schooling, this disparity highlights the challenge for Stage 4 teachers to seek out and plan for opportunities to teach and learn through critical reflection with younger cohorts. For Marcus, critical reflection is a way to challenge and push learners to consider "Why this? Why so?" (Jefferson & Anderson, 2017, p. 95). This follows the Crucible and its questioning stage where learners begin to pose and respond to 'why?' and 'how?' questions that allow them to dig deeper into the content. Considering this, the question for teachers of critical reflection becomes: How do I embed opportunities for critical reflection in the content I am teaching?

For Violet's (Final Interview with Violet, 2022, lines 16-17) Geography class, students developed "an enjoyable and positive receptiveness to the word 4Cs [and] critical reflection." This surprised Violet, as she regularly embedded 4Cs processes in her daily lessons with this class, yet her students were still excited to be part of the study and involved in using the Crucible in a more intentional way. Across her first two years of teaching, Violet believed that her use of the Crucible was somewhat scattered across her lessons, whereas this study gave her an opportunity to plan and apply the Crucible to teach critical reflection explicitly with a clear goal of fostering this capability in her lessons with this class. Violet (Final Interview with Violet, 2022, lines 24-29) stated,

[it was] more of a deliberate grappling with critical reflection across four weeks or three weeks sort of. I was really, that was notable because it was a bit deeper and, yeah, it kind of felt like more of like a reckoning with it rather than just an exposure moment for kids, for me, they're two notable things. I think it helped me to think laterally and to look out for critical reflection in my content. And that was fun because you see it everywhere.

Violet's (Final Interview with Violet, 2022, line 26) emotive portrayal of her experience of using the Crucible as a "reckoning" rather than simply an "exposure moment" reveals a deep engagement with this teaching tool across the study. The students in Violet's class were compelled to 'reckon with' the Crucible, thereby deeply considering how it fit into their learning both meaningfully and purposefully as part of their Geography study and understanding of the 4Cs. Furthermore, students were encouraged to deliberate the content and come to calculated conclusions about their study of tourism and its impact on their actions as future tourists in Bali, which was facilitated and strengthened through their engagement with the Crucible. As a teacher, Violet reflects that she was invited "to think laterally" about the content and seek out connections to foster critical reflection so that it was embedded into the

unit with a sense of forethought and continuity, rather than only capitalising on sporadic moments where critical reflection might manifest during learning through questioning or discussion.

One of the challenges Violet experienced in this study was carving out dedicated time and space for deep thinking to occur about a topic being covered before moving onto the next. Violet perceived this as a pressing challenge for all teachers, yet one that hindered the process of critical reflection. This involved allowing students more time to sit with the learning they had completed and allow it to lead them to conclusions, realisations, and/or breakthrough moments that only deep thinking and reflection could afford. Despite this challenge, Violet believed that she did curate and facilitate moments of critical reflection with her class. Violet (Final Interview with Violet, 2022, lines 114-122) commented on this below:

I was deliberate in, you know, looking at diverse perspectives and, you know, kind of saying, “what would this person think? What would this person view it? How would this person view it?” Or, you know, showing kind of counter perspectives through, you know, cartoons. So, I was quite deliberate in creating opportunities for students to notice assumptions or to... grapple with it. But it is very challenging in terms of like it’s complex for the students to be, I think they engage with those snippets, right? Or like those skills that are like capacities that build into kind of a bigger picture of critical reflection. And I think that was facilitated often through provocations, or images, or poetry or, yeah. Letting your stimulus, be really powerful and be really significant rather than a fleeting moment was maybe one of those things that felt like I was able to facilitate that.

Violet’s reflection ties in purposefully with the type of transformative learning she was able to generate in her classroom. Violet noticed that the transformative nature of her experience when

teaching critical reflection was that it made her hone into two topics more deeply: technology and tourism, with a special focus on the impact of tourism in Bali. The richness that was sought by using Bali as a case study in this unit came from Violet's inclusion of different perspectives, narratives, and lived experiences to support students to adopt a more nuanced understanding of how tourism can impact interactions between peoples and place. Part of Violet's transformation tale were the moments of "disorientation" where her students were provoked/challenged to think critically about the topic they were studying (Final Interview with Violet, 2022, line 339). This was achieved through the introduction of provocative perspectives, for example, when Violet used the Leunig cartoon and Instagram post to build a critical commentary around the notion of motherhood and how it is influenced by technology in a contemporary society. When students were thrown into such moments of disorientation, they participated in the third stage of the Crucible where their ideas and assumptions were being challenged, contested, or evaluated in a way that was new or perplexing. Once students had adequate time to grapple with these new ideas and perspectives, they remerged into the next stage, the re-solving stage, with an intention to reconstruct what they knew with new insight and knowledge. Violet felt that her students were able to reap the transformative benefits of critical reflection since they were able to enter and emerge from these moments of disorientation with new insights and a newfound curiosity about the topic they were studying. A vital understanding that can be taken from the learning experiences in Violet's class is that transformation does not need to appear to learners as a grand and insightful moment, but can occur in a more thoughtful and progressive manner. Violet narrated one such moment below:

"The moments when I thought, well, that's a moment of transformation. One where someone said, "can I change spots?" In that horseshoe, but that's a moment of transformations for me. Like, like my view of what that looks like in the classroom and was like a student wanting to move and, and saying, you've shifted my view, and this

is why? And it's not that I stand with you entirely, but I've taken on what you've said and I'm shifting and that's cool." (Final Interview with Violet, 2022, lines 358-363)

The horseshoe activity was memorable for Violet because it afforded her an opportunity to witness how a student's assumption could shift through the process of critical questioning. Violet deemed this a transformative moment because it demonstrated critical reflection in action, as the student was beginning to shift their frame of reference through critical thought and discussion. Furthermore, by asking the student to justify why their view had shifted, Violet modelled the process of posing '*why?*' questions to challenge and test the veracity of the learner's new stance by compelling them to defend it. Significantly, whilst the primary aim of critical reflection is to encourage students to reconsider previously unexamined assumptions to challenge their worldview in positive and agentic ways, it can simultaneously inform and strengthen their current perspectives. This accounts for the students who may not have shifted their views during this horseshoe activity, but rather benefited from watching their teacher model how to critically question one's viewpoint so that they could adopt this skill for future use. Violet described other transformative moments that occurred as students started to break away from the preconceived binaries formed about tourism. Violet (Final Interview with Violet, 2022, lines 372-384) said,

You know, it, you know, ditching Maccas entirely in Indonesia versus, visiting some Indonesian restaurants, you know, kind of looking at generative, language and solutions and trying to plant that seed a little bit... I suppose what I'm also hearing is transformative is that they were learning to take away the binary and to sit in more nuanced, complex, situations and realities for people and for... and I think the more they're exposed to that sitting in that complexity or uncertainty or that kind of, it's so much more realistic than just, tourism is good, tourism is bad, or technology is good, technology is bad. But it's like the ongoing

conversations that we, as you know... and adults are having around, like, how do I engage with technology? Well, it's really messing with my focus. You know, it's feeling some capacities that I've always had in my life, you know? I'm grappling with these conversations with my, you know, my family and friends, and I'm talking about how to engage well with technology in my world.

From a post-structural perspective, the tendency to group social phenomena (such as the notion of 'good' vs 'bad' tourism) neglects their complexity and may not account for all the experiences of tourism that do not align with this binary (Béres & Fook, 2020, p. 12). Violet supported students to re-solve their understanding of this binary by offering them a vocabulary through which they could critically explore the idea of tourism, for example, by introducing students to the notion of 'ecotourism'. By curating a unit where students were compelled to "sit with" the complexities of a topic in a nuanced manner, Violet allowed critical reflection to flourish in her classroom. Although this type of learning is messy and does not always produce a clear answer, both Violet and her students approached it with a shared understanding that they would emerge from the other side together and with a determination to keep trying. It is the power of grappling with this complex knowledge as part of a group that prepared students to take these conversations into their own households, workplaces, and social settings as independent, young adults.

6.7 Shaping Curriculum Content through Multiple Perspectives, Narratives and Voices

The selection of subject content and the way this content has been curated by teachers to showcase diverse perspectives, narratives, and voices fuels the critical reflection process. In the English classroom, where the teaching of texts forms the bread and butter of the English teacher's work, quality text selection is one way this can be achieved. At the time of this study,

English teacher participants were using the old version of the Kindergarten to Year 10 NSW English syllabus (NESA, 2019) as the implementation of the current English syllabus (NESA, 2024c) for Stage 4 had not yet been taught in NSW high schools. As such, I will outline how the selection of content and texts by our English teacher participants aligns with the requirements of the English syllabus (NESA, 2019) in ways that promotes a multi-perspectivist approach to teaching critical reflection. In Stage 4, English students are expected to:

explore texts critically, evaluating content, differentiating between fact and opinion, challenging points of view and identifying, considering and appreciating cultural expressions. (NESA, 2019, p. 19)

This is also taught through the lens of the English Textual Concepts (NSWDOE, 2024), an initiative developed by the NSW English Teachers Association and The NSW Department of Education to frame the teaching of English through key concepts and process, which include the key concept of ‘perspective’. Furthermore, the content and text requirements for Stage 4 English stipulate that students are exposed to texts that provide them with experiences of:

- widely defined Australian literature, including texts that give insights into Aboriginal experiences in Australia
- a wide range of literary texts from other countries and times, including poetry, drama scripts, prose fiction and picture books
- texts written about intercultural experiences
- texts that provide insights about the peoples and cultures of Asia
- everyday and workplace texts
- a wide range of cultural, social and gender perspectives, popular and youth cultures
- texts that include aspects of environmental and social sustainability (NESA, 2019, p. 23)

These mandated text requirements and the critical thinking and analysis skills that students progressively develop to respond to and compose English texts pave opportunities for students to critically reflect on the content and the perspectives, narratives, and voices that they encounter. All three English teachers agreed that text selection was pivotal to how students were exposed to perspectives and narratives that would challenge their thinking and broaden their worldviews in thoughtful ways. Jeremy spoke about his input in the text selection process when working with Dominique and Marcus to collate a selection of poetry texts for the English unit. The start of the unit presented an opportunity for teachers to focus on historical perspectives of Australian identity, which included traditionally male and white Australian perspectives. This was seen through texts like the poem *My Country* by Dorothea Mackellar (2021/1908), and *The Man from Snowy River* by Banjo Paterson (2008/1890). Paterson's (2008/1890) poem offered teachers an opportunity to address the absence of women in the poem with the class, which compelled students to think critically about how the female Australian identity was historically constructed. Jeremy emphasised that examining Mackellar (2021/1908) and Paterson's (2008/1890) poems side-by-side with his class, offered a method of drawing out the difference in perspectives about Australian values and attitudes towards the landscape, as well as highlight the contrast in male versus female narrator.

Another key text which was used to explore issues of sustainability, and the changing nature of the Australian landscape was Paul Kelly's (2020) sardonic song, *Sleep, Australia, Sleep*. This song provoked English students to challenge their assumptions about the Australian landscape in light of the impacts of climate change, thereby offering a point of comparison with how the land is presented in Mackellar's (2021/1908) poem. To incorporate an Indigenous Australian perspective into the poetry unit, the teachers chose to use snippets of songs by the Aboriginal rapper Baker Boy, specifically concentrating on the song *Marryuna* (2017) by

Baker Boy and Aboriginal vocalist, Yirmal. The inclusion of an Aboriginal voiced text like *Marryuna* (Baker Boy & Yirmal, 2017) exposed students to a uniquely Aboriginal narrative of Australian identity, one which interested the class because of the popularity of Baker Boy's music amongst the students. Jeremy and Dominique initially believed that this text selection would serve as a 'hook' to capture students' curiosity and engagement with the unit, whilst providing them with a more youthful and relevant perspective of Aboriginality that they could resonate with. In one activity, Jeremy noted how he presented students with the following line from the song *Marryuna* (Baker Boy & Yirmal, 2017), "I'm a proud black Yolngu boy with the killer flow, listen to the yidaki, listen to it blow." This quote was presented without any context provided to the class so that students could conduct a deep noticing activity to reflect on the language, particularly words/phrases like "proud", "black", "Yolngu", "yidaki", and "killer flow" (Baker Boy & Yirmal, 2017). Students then conducted a collaborative research activity to define these words and critically consider how the Yolngu terms shaped the meaning of the text and offered a representation of Aboriginal Australia in the 21st-century. Jeremy believed that explicitly teaching the Yolngu language used in this song and introducing the text early in the unit enabled the class to better engage with this perspective and think critically about Baker Boy's identity and personal narrative.

Across the board, Australian educators are mandated to program content that promotes intercultural understanding as a cross-curriculum priority area in their subjects (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2024). Students must develop cultural understanding about "their own cultures, languages and beliefs, and those of others," and examine the similarities and differences between cultures to promote cultural awareness and foster mutual respect. Fostering intercultural understanding will inevitably lead students to explore new and diverse cultural perspectives that can spark critical reflection, as they learn

“to value and view critically their own cultural perspectives and practices and those of others through their interactions with people, texts and contexts across the curriculum” (ACARA, 2024). In Violet’s ‘Interconnections’ unit, students were exposed to various social, cultural, and historical perspectives about technology use and tourism through the content being taught in their Year 8 Geography class. One notable example is when Violet began to challenge students’ assumptions about how tourism in Bali is perceived from a cultural standpoint. Here, Violet facilitated a discussion around the idea that when visiting a place like Bali, whose culture is steeped in its language, learning the language would demonstrate a level of respect for the place they are visiting and allow them to immerse themselves more deeply in Balinese culture. Of course, students aren’t expected to become fluent in Balinese or Indonesian to be perceived as a respectful tourist, therefore, Violet emphasised to her class how trying to learn key greetings would enable them to interact in this place in a more culturally responsive manner. By having such critical conversations, Violet guided her students to a deeper awareness of Balinese culture and helped them to appreciate the dynamic relationship between language and culture, and how this impacts the way one interacts with a place as a tourist.

When choosing her content, Violet framed it around various stimuli and provocations that exposed students to different perspectives, narratives, and voices around these topics, including cartoons, poems, songs, images, Instagram posts, and real-life experiences. In her reflection, Violet (Final Interview with Violet, 2022, line 281) stressed that she didn’t want her students to simply “step into the people’s shoes” when encountering new perspectives on the content, as this would not allow for a nuanced understanding of the experience. Rather, Violet wanted her students to acknowledge that such perspectives exist and attempt to understand them from many angles. Another avenue through which Violet introduced students to different perspectives was through her use of 4Cs processes which facilitated opportunities for students

to share their own perspectives about the content being discussed. One such strategy was the use of the horseshoe discussion. Although this example has already been discussed at length in previous chapters, this example allowed students to voice their assumptions and challenge them in healthy and respectful ways, as Violet (Final Interview with Violet, 2022, lines 281-291, 293-294) described below:

I did a horseshoe as one way to visually represent diverse perspectives. That was kind of crucial and that's that prompted a lot of that conversation around diverse perspectives to technology. So, for, you know, the SLSO [School Learning and Support Officer] that was in the room has young kids and was able to kind of say, "whoa, whoa, whoa." You know, "this is my perspective on, on these issues around technology." And I was able to say like, "whoa, whoa, whoa, I don't have kids. I'm not a kid myself." "This is my per-" you know, being a bit clear and saying, "this is where I stand," and then saying, giving kids an opportunity to move, change their perspective. And I think when Sally the SLSO got involved, the kids started to fire up a bit and get a bit more... become a part of it and want, and some wanted to change their view and some wanted to challenge Jodie in a healthy way.

In this horseshoe activity, the class stood in a horseshoe arrangement around the desks and responded to a question around whether people should travel to Bali. Once they had expressed their opinions, students then chose to counter another student's perspective in the horseshoe. Sally, the SLSO who worked with Violet's class, had joined in this activity, which Violet believed prompted the students to challenge her perspective in a healthy way. This resulted in what Violet (Final Interview with Violet, 2022, line 294) described as a display of "good, fiery" critical discussion around this topic. Significantly, both Violet and I noted how students were determined to voice their perspectives in a passionate but considerate manner, thereby revealing that they could engage in the critical reflection process effectively.

6.8 Letting your Stimulus be Powerful: Using Provocations

Provocations have the power to challenge assumptions and support students to become agentic, critically reflective learners. In Jeremy's final interview, he commented on a lesson where he featured provocations to spark critical reflection around the notion of Australian identity. To begin this lesson, Jeremy chose to lead a provocation activity to spark critical thinking using a selection of written quotes highlighting different perspectives around identity. This provocation activity featured in the initial lessons of the poetry unit, to challenge students' assumptions about identity and what this looked like for people of diverse cultures, language backgrounds, and genders. The provocations that I will discuss are two written quotes from the songs *Marryuna* (Baker Boy & Yirmal, 2017) and *Don't Fence Me In* (Crosby & The Andrew Sisters, 1944).

To lead the first provocation activity, Jeremy chose to display the song quote in isolation on the whiteboard for students and frame it as a deep noticing activity, which incorporates this 4Cs process by the same name. The aim was that students were deeply immersed in the provocation and were provided with the time and space to consider what they were reading, how it made them feel, and what ideas surfaced in their minds. The first song quote presented to the class read, "I'm a proud black Yolngu boy with the killer flow, listen to the yidaki, listen to it blow" (Baker Boy & Yirmal, 2017). Once students had spent a few minutes noticing the quote silently, Jeremy invited the class to share their noticings aloud. This quote is provocative not only because it offers a distinct and pertinent portrayal of Baker Boy's identity as a young Yolgnu man living between two cultures, but also in the languages it blends (English and Yolgnu Matha). For most students in this class, words like "yidaki" and "Yolgnu" were unfamiliar to them, and this provoked questions around the meaning of these words and their use in the song. The provocative quality of this quote stemmed from its use of language and

the blending of the two languages to invite curiosity and provoke critical thinking. Jeremy saw this as an opportunity to indulge his students' curiosity through the subsequent research task where they defined the unfamiliar language in the quote and discussed its relevance to their understanding of Australian identity. Jeremy noted that students were quite captivated by this provocation, as some students recognised the line from the song *Marryuna* (Baker Boy & Yirrmal, 2017) and wanted to know more.

Another key quote that featured in this lesson was from the opening to the popular American song by Bing Crosby and The Andrew Sisters (1944) titled, *Don't Fence Me In*, which reads:

Oh, give me land, lots of land under starry skies above

Don't fence me in

Let me ride through the wide open country that I love

Don't fence me in

This provocation was chosen as it offered another perspective through which students could view their relationship to land and its connection to their Australian identity. The word "land" is used quite loosely in this song which allowed for greater interpretive versatility, as these lines could relate to both students born in Australia and those born abroad. The repetition of the chorus "don't fence me in" (Crosby & The Andrew Sisters, 1944) also provoked reflection about autonomy and freedom, which is something that students could personally relate to as young adults.

The title of this section was fittingly adapted from a quote spoken by Violet in her final interview where she discussed the importance of using well-selected and powerful stimuli to provoke critically reflective learning. Violet (Final Interview with Violet, 2022, lines 122-123) quotes, "letting your stimulus, be really powerful and be really significant rather than a fleeting

moment was maybe one of those things that felt like I was able to facilitate.” The ‘stimulus’ that Violet refers to can be any type of learning material that provokes deep thinking and is featured in a way that gives students an opportunity to practice reflection and apply their knowledge and understanding. In retrospect, Violet (Final Interview with Violet, 2022, line 124) felt proud of her ability to facilitate what she termed as a form of “grappling” with different stimuli in her lessons, which acted as provocations to help her students critically reflect. For Violet (Final Interview with Violet, 2022, line 135), the power of the provocation arose from its use as a “stem or spark or trigger” to activate thinking and critical questioning. This was evidenced in Violet’s use of the Leunig (2019) cartoon titled *Mummy was busy* to provoke a reaction from her class about the idea of motherhood and the use of technology. The poetic writing that formed part of the provocation in this cartoon (Leunig, 2019) read:

Mummy was busy on Instagram
When beautiful bubby fell out of the pram
And lay on the path unseen and alone
Wishing that he was loved like a phone

What I first noticed about this provocation was the accessibility of the language in allowing students to easily reflect on Leunig’s perspective about the use of technology when parenting. The choice of emotive language like “busy”, “unseen”, “alone” and “loved” to create pathos, combined with the lyricality of the writing, made this stimulus (Leunig, 2019) a perfect provocation for Violet’s mixed ability Year 8 Geography class. Once students had read the stimulus and reflected on their position in relation to the assumption that Leunig (2019) expressed in his cartoon, students were invited to complete an activity where they would adopt a different POV. This was a continuation or ‘part two’ to this provocation activity, to allow students to critically reflect from either the mother’s or the child’s POV. These ideas were

communicated in a written reflection by students, as they considered how they would feel if they were in this situation and why the child or mother reacted in this way. This activity included an element of creative thinking, as students were free to hypothesise about the situation of each character. For example, some students expressed that the baby fell out of the pram because they wanted attention, and this was the only way the baby could seek it (Observation notes for Violet's lesson on the 9th of June, 2022). Other students focused on the sense of loneliness and neglect felt by the baby and expressed feelings of anger and frustration towards the mother for using her phone while spending time with her child (Observation notes for Violet's lesson on the 9th of June, 2022).

This stimulus (Leunig, 2019) was paired with another provocation, in the form of an Instagram post from an Australian woman who condemned the way Leunig portrayed the mother in his cartoon. Violet liked how provocative this post was, as it sparked a critical discussion around the way technology can be used to connect or disconnect people in society. Violet (Final Interview with Violet, 2022, lines 237-239) states how, "the Instagram post was provocative...I wanted a bit of a kick in the lesson, so that they're [the students], you know, surprised...it's not shock factor, but it's kind of, okay, listen up, we're on our toes here." The reaction provoked by this Instagram post had the intended effect, as students began to consider the mother who created the post and her standpoint on the issue. Violet (Final Interview with Violet, 2022, lines 249-250) wished to make it clear to her students that, "you can't shame mothers for using technology. That technology has a place [for] raising children, or learning, or recharging." Adopting the alternate perspective meant that many learners were challenging their assumptions about this issue. Violet noted how introducing this post to juxtapose Leunig's (2019) perspective in the cartoon was pivotal, as it encouraged students to develop a more

nuanced understanding of the use of technology today. Violet (Final Interview with Violet, 2022, lines 251-254) stated,

It meant that that perspective took all of us away from that, that easy perspective of, technology is bad and completely disconnects us. And it was me trying to show like, this is a real per, like a person who feels hurt by Leunig's cartoon, so hurt that they've, you know, written up this post in an inflammatory kind of way.

This “easy perspective” that Violet refers to is one that lacks a nuanced interpretation of the complexity of motherhood in a technologically saturated world (Final Interview with Violet, 2022, line 251). During my observation of this lesson, Violet ensured that she highlighted how this activity supported students in their critical reflection, often visually pointing to the stage of the printed poster of the *Crucible* that they were practising in any given moment (Observation notes for Violet's lesson on the 9th of June, 2022). Violet's decision to combine these two stimuli and use them as provocations to better equip her students to grapple with complex issues around technology use in modern society was both memorable and effective in this lesson.

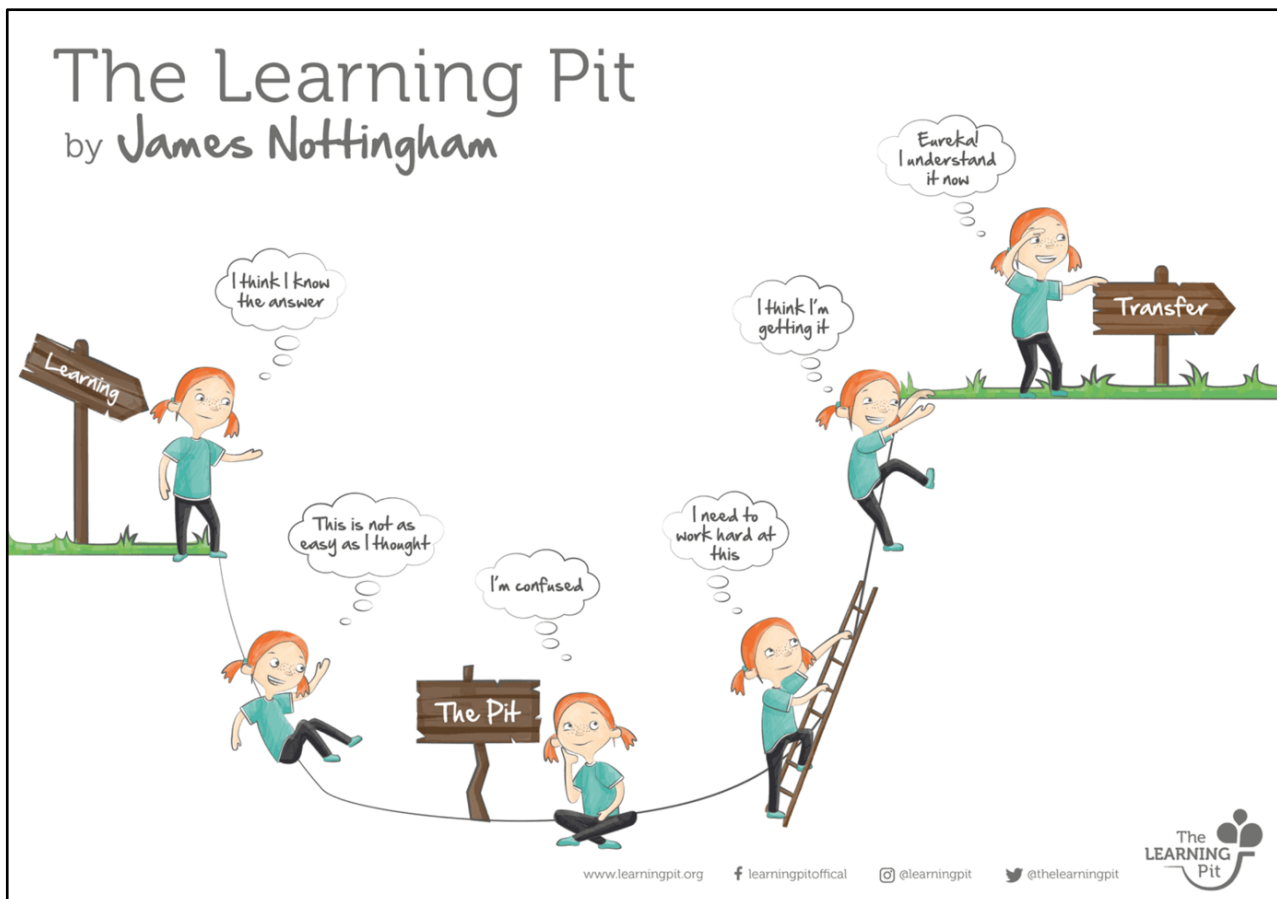
6.9 Entering ‘The Learning Pit’: Deep Learning

When students critically reflect, they enter moments of disorientation when they begin to question and challenge their assumptions about the content being investigated. This moment of disorientation can be compared to the confusion that a learner feels when entering Nottingham's (2016, p. 4) “pit”, which similarly “evokes feelings of uncertainty and discomfort.” According to James Nottingham (2016, p. xxv), the ‘pit’ (see Figure 6.8) is a “metaphor to identify that state of confusion a person feels when holding two or more conflicting thoughts or opinions in their mind at the same time.” Nottingham's (2016) “learning

pit” forms part of what he coins as “the Learning Challenge”, which can be conceptualised as a “child-friendly representation of Vygotsky’s ZPD” (2016, p. 2). Challenging learning encourages students to “investigate contradictions and uncertainties” so that they might deeply understand a topic by stepping out of their comfort zone (Nottingham, 2016, p. 2). Critical reflection, as conceptualised and practised in Jefferson and Anderson’s (2017, 2021a) 4Cs approach, embraces Nottingham’s (2016) “Learning Challenge”, as it seeks to generate learning dispositions that helps students to grow as agentic learners in both their thinking and actions. Conversations about the nature of challenging learning and what it feels and looks like to enter and re-emerge from this “learning pit” surfaced throughout the final interviews with teachers. For students to critically reflect effectively, they must enter into the pit and re-emerge with a propensity to re-solve their assumptions and ideas in new and profound ways.

Figure 6.8

An illustration of ‘The Learning Pit’ by James Nottingham



Note. From The Learning Graphics, by J. Nottingham, 2024, learningpit.org (<https://www.learningpit.org/thelearningpit/graphics/#classic>). 2024 Challenging Learning Ltd.

A key aspect of Nottingham's (2016) "learning pit" lies in the second stage, when the learner steps out of their comfort zone. When students are presented with a perspective that rivals their own during critical reflection, this causes cognitive dissonance, as the learner is forced to grapple with two ideas that conflict each other. It is here that the learner "begins to wobble," much like a person would wobble if they attempted to ride a bicycle without training wheels for the first time (Nottingham, 2016, p. 3). It is at this point that most teachers jump in to help the student without allowing them to fully experience this moment of disorientation and push through the challenge themselves. When critically reflecting, students need to be permitted to 'wobble' in this same way so that they can consider the challenging perspective they have encountered and attempt to make sense of it. If the student continues to struggle, the teacher may help them out of the 'pit', and with practise, progressively allow the learner to develop the skills to autonomously navigate this process. Marcus and Dominique shared a unique co-teaching experience with their English class throughout this study to guide students through moments of challenging learning to foster their critical reflection skills. In his final interview, Marcus described working alongside Dominique as one of his most notable experiences in the study, as it aided him to understand and diagnose the gaps in student learning within this Year 8 English class. Marcus (Interview with Marcus, 2022, lines 15-22) stated,

having the opportunity to work, particularly with Dominique...helping her to, to self-reflect about, you know, how she feels when the kids go into that learning pit [a concept to describe challenging learning] and allowing that moment of disorientation for the kids. So they're not entirely sure how to do something or what something looks like, and then let 'em find it for themselves. I think that sometimes highly conscientious teachers who want to do the

right thing by their students will, you know, rescue them. And particularly when you've got high potential kids, means that they're not getting used to doing things themselves.

For Marcus, inviting students to take part in the challenge of annotating poetry to find the subtext was pivotal to their progression and success in this 'top' English class. Many of the students in this class were identified as high potential learners that would benefit from learning that challenges them to think deeply and conceptually about the texts they are studying. Critical reflection adds another dimension to this by encouraging deep learning and student growth. Although Marcus was quite confident with facilitating this process with students, Dominique was less comfortable about how to navigate the moment students entered "the pit" (Nottingham, 2016, p. 2). Across a few lessons, Marcus and Dominique taught the poem *My Country* (Mackellar, 2021/1908) and led students to annotate the poem in groups. The aim was to see how students would approach annotating the poem for the first time in groups without prior instruction. Marcus led this activity, placing the students in randomly assigned groups, thereby taking them away from their friendship groups and out of their comfort zones. Students were provided the activity instructions and allowed to work independently in their groups, or as Marcus (Interview with Marcus, 2022, lines 360-361) stated, "let's see what you can come up with and do it on your own." Both Marcus and Dominique facilitated this activity, jumping in and providing support to groups who required it. However, Marcus wanted Dominique to provide students with the time to work it out themselves before providing them with her assistance. Dominique (Final Interview with Dominique, 2022, lines 91-96) felt hesitant about this and recounted her thoughts during this experience:

I was thinking, "well, this is a bit chaotic. I don't know if the kids actually know what's going on?" That's what, like halfway through it. I was watching the kids. I was saying, I can tell that they were like looking at me, like "what do I do miss?" And I was just like, sitting

back. And by the end of it, what I think Marcus was most proud of is the fact that they were able to sort of, he was saying like, ‘dig themselves out of it’, like find that solution without him having to give them the answers.

Dominique’s experience is telling since she also found herself in her own “learning pit”, as she needed to sit back and experience the discomfort that came with withdrawing immediate support to see what students were capable of on their own (Nottingham, 2016). Marcus (Interview with Marcus, 2022, lines 388-389) saw this as an important learning curve for the pair, as he states how “[this] moment of discomfort was the diagnosis of where they [students] were up to and what they didn't know. It was really useful.” Consequently, the student work samples that were collected and the feedback that both teachers garnered from students after this lesson was pivotal to their own critical reflection about the abilities of the students in this class and the apparent gaps in their learning. When Marcus (Interview with Marcus, 2022, line 364) assessed the work samples, he found the analysis to be quite “simplistic” in nature. Students were able to extract basic language techniques like visual imagery and rhyme from the poem, yet the analysis lacked substance and an ability to convey *how* the poetic language shaped the meaning of the poem. When Marcus (Interview with Marcus, 2022, lines 367-369) received student feedback about their experience during this activity, he expressed how, “they gave me the reflection to say, well... they didn’t necessarily have those skills, on how to annotate a poem or how to understand the way a poem was conveying meaning.” Marcus continued to explain why he believed students were not able to effectively connect with this ‘*how?*’ question when annotating the poem.

The trouble with a lot of our students is they wanna start to find techniques and they don’t remember that the techniques are pointless if you don’t know the meaning, like, what is the poem saying first of all? What is the purpose of this? And then how to convey the ideas?

So, start with what, and then go to how? So that was really interesting. (Interview with Marcus, 2022, lines 377-381)

Marcus and Dominique's assumptions about the capabilities of the students in this 'top' English class were re-solved when they assessed students' analytical writing capability and observed their hesitancy around working in groups. Thus, a major challenge for both the teachers and students in this class was progressing from the '*what?*' to the '*how?*' when analysing texts at this level. This not only required the development of conceptual and analytical writing skills, but a stronger ability to communicate their ideas in groups and share those insights to strengthen their analysis. Although students struggled with the activity, it effectively materialised the gaps in their learning and prompted Marcus and Dominique to evaluate their pedagogy moving forward, to develop their students' collaboration skills and analytical/conceptual thinking when encountering the prospective poems.

6.10 Chapter Conclusion

Chapter Six has presented the findings from the final phase of the study, which offered teachers a moment of introspection to consider how effectively they fostered critical reflection in their respective Year 8 classes. The next chapter will present the conclusions that emerged from this study. It will do this by offering a summary of the research findings and conclusions from Phases One to Three of the study, the limitations posed by the study, and the directions for future research.

Chapter 7: Conclusions

7.1 Chapter Introduction

This chapter has three aims in the conclusion of this thesis: Firstly, to offer a synthesis and summary of the main findings in each phase of the study; Secondly, to respond to the implications of these findings by drawing conclusions that will orient future research, and finally, to consider the directions for future research in this field of study.

7.2 Overview

This study explored how critical reflection could be taught creatively and through a multi-perspectivist lens to foster transformative learning experiences for Year 8 teachers and students in a high school that adopts the 4Cs approach. The study is informed by Jefferson and Anderson's (2017, 2021a) 4Cs approach, to discover how critical reflection is theorised, taught, and experienced by secondary teachers utilising this approach to experiment with poetry as a tool to facilitate critically reflective learning in their classrooms.

The main research question informing this study is as follows:

How can critical reflection be imagined creatively in the Stage 4 classroom to support a multi-perspectivist approach to teaching and learning?

7.3 Phase One of the Study

Phase One of the study gauged the teachers' initial thoughts and assumptions about the teaching of critical reflection at Moonstone HS using the 4Cs approach. The teacher participants arrived in this study with varying degrees of confidence and experience with teaching critical reflection using the Crucible. For teachers like Violet, who were more familiar with critical reflection and had some experience with using the Crucible in their lessons, they had the opportunity to

expand on their strategies and previous use of the Crucible, whilst others voiced their current understanding of critical reflection and their aspirations for using the Crucible in this study.

A list of six superordinate themes emerged from the data analysis stage that was conducted using IPA. These themes translated into the core findings that represented this phase of the study, and contextualised what teachers already knew about critical reflection, their competency with the 4Cs and Crucible as a teaching tool, and their desire to experiment with poetry as a creative and reflective tool. Key quotes lifted from the interview transcripts and used to evidence the themes in Master table A were arranged into a poetic montage in the first found poem that appears in Chapter Four, to evoke the feelings, anxieties, and assumptions each teacher brought to this study.

7.3.1 Conclusion One: Supporting Students to Critically Reflect is Vital

Critical reflection is a cognitively demanding and emotionally challenging skill for students to learn and master. It takes time, patience, empathy, and a willingness to be open to new ideas, perspectives, and experiences to truly critically reflect. In his initial interview, Jeremy (Initial Interview with Jeremy, 2022, lines 298-299) spoke about the value of inviting the learner to “move the puzzle piece around for themselves,” when critically reflecting. This assumes a certain level of confidence, competency in the subject area, and personal autonomy to take the new knowledge or understanding and allow it to resonate with them and enrich their learning and actions in some way. To be open to new ideas and exercise empathy, students must be in touch with their emotions and understand how to regulate them when exposed to new experiences or ideas that are provocative. As Jeremy (Initial Interview with Jeremy, 2022, line 299) says, it is up to the learner to “decide how they feel” at the end of this learning experience, as this forms part of the autonomy they exert during critical reflection.

The emotional learning that teachers can provide to their students will help prime their hearts and minds for critically reflective learning. Supporting students to regulate their emotions during a critically reflective learning experience might involve asking questions surrounding the learner's initial feelings and reactions to what is said, particularly if they have an especially visceral or physical reaction (i.e., anger, laughter, tears, etc.). This might involve asking the student to identify the emotion they are exhibiting or consider why they have reacted in this way, something which was visible in Violet's classroom. This also necessitates that students are made to feel safe and comfortable to express their emotions in the classroom and can articulate when an emotion is overpowering them in an adverse way (for example, an outburst of anger). This emotional learning is embedded into the 4Cs approach through the pedagogical tools that are used to foster these 4C capabilities (Jefferson & Anderson, 2017). For example, the teacher can direct students to the cognitive domain of the LDW to 'think *why?*' they feel a certain way, and perhaps 'how?' this feeling is affecting them personally and those around them, to build empathy.

A high challenge, high support (Hammond, 2001; Wilson & Devereux, 2014) learning environment that adopts scaffolding to help students critically reflect at each stage is key to such a guided approach. At the first stage of the Crucible, scaffolding becomes important as students identify and articulate their assumptions, as some learners may not possess the vocabulary or the capability to express what they are thinking and feeling. For example, an EAL/D student whose spoken vocabulary is still developing. Scaffolding is especially important when students arrive at the questioning stage of the Crucible, where they begin to ask themselves 'why this? why so?' to probe more deeply their assumptions about a topic. Dominique foregrounds the significance of offering students more time as a form of scaffolding, especially as students are thinking and articulating their ideas. This is

supplemented by Dominique's own preference to 'talk-out' her initial thoughts as she problem-solves with her class, so that they could hear her inner dialogue and see this thought process being played out in real time.

Once students reach the contesting, elaborating, and adapting stage of the Crucible, they are now ready to test their assumptions and challenge what they know. It is this stage of the Crucible that also requires teachers to be ready to offer students support as they confront previously held assumptions and realise potential gaps in their knowledge. As Fook and Askeland (2007, p. 523) argue, learners will feel their vulnerability more keenly in these moments because exposing their assumptions may mean admitting mistakes or insufficiencies that shape how others perceive them. This then creates reluctance, as the learner will be less inclined to share their beliefs for fear of being wrong or appear ignorant in front of their teacher and peers (Fook & Askeland, 2007, p. 523). To overcome this, the teacher may initially invite students to share and contest their assumptions anonymously, to negate the potential fear or humiliation that might be attached to this public forum of ideas. Violet's (Initial Interview with Violet, 2022, lines 245-246) experience in this study highlights this, as one way to negate the initial anxiety surrounding the sharing of one's assumption/s is to model it, or "model a few assumptions so that they [can] get a taste or a flavour of it." Another strategy that Violet promoted was to have students practise identifying another's assumption first, preferably a person they are learning about rather than those of their classmates, to build confidence and competency when practising this stage of the Crucible. Adopting a guided approach to critical reflection, regardless of the ability of the learner, will generate a high challenge, high support (Hammond, 2001; Wilson & Devereux, 2014) learning environment that will better equip them to critically reflect.

7.3.2 Conclusion Two: Narrative is a Powerful Medium for Critical Reflection and Perspective-taking

Critical reflection is inherently narratological, as it is the narratives we tell about ourselves that shape who we are. Narrative as both a medium for reflection and a medium through which knowledge is constructed and shared with others is powerful and pivotal to the critical reflection process. The presence of narrative as a means through which students engaged with Geography content and case studies in a critical way in Violet's classroom was palpable. When speaking of her prior experiences of teaching critical reflection, Violet demonstrated an engagement with narrative texts that presented stories through a multi-perspectivist lens for her students to critically consider and ultimately spark critical reflection. Once such text was the documentary film *Go Back to Where You Came From* (O'Mahoney et al., 2011), which presented students with an exploration of the refugee experience in Australia. Violet's expectations for how her students would react to the perspectives presented about asylum seekers in the documentary were challenged, as she observed that students were very open-minded while viewing the text, as opposed to students she had previously taught in other high schools. Hearing such narratives as ways of exposing students to new and provocative perspectives on a topic is part of the critical reflection process, as Dominique similarly demonstrated in her interview (Final Interview with Dominique, 2022). Perspective-taking arouses doubt in the learner, which helps students to consider what they know and challenge their assumptions. It also presents students with a new or 'fresh' perspective on a topic or problem they are solving, especially when students are faced with subjective problems that only they can see (Southworth, 2022).

For Dominique, Jeremy, and Marcus, the study of texts lies at the core of the English teacher's work, particularly narrative texts that seek to represent intercultural experiences and those that

portray Aboriginal and Torres Strait Islander histories and/or cultural narratives. Exploring these narratives offers students an inlet into another's worldview and a space to begin a discourse about difference and diversity, as Dominique's students experienced when they studied the text *Shooting Kabul* (Senzai, 2010). As part of this textual study, students were required to critically appraise the novel to consider how perspective and context shape the way it is read. This process of formulating and communicating one's interpretation of a text can be a critically reflective process, since it is a personal articulation of a student's thoughts and feelings towards what they have read. As Dominique states, "being open to different interpretations of a text" helps prime students for critical reflection. Some pertinent questions that are explored when narrative is used to spark critical reflection include:

- Whose perspective/s are presented? Is there a dominant voice?
- How does context shape the construction/interpretation of the text?
- What POV is the text written in? Does this change? Why?
- What is your interpretation of the ideas/themes/concepts in the text?
- What has influenced your reading of the text?
- Why have you come to these conclusions?

Conversely, narrative is also a medium through which reflection occurs as it is the most accessible and prevalent way that we as humans tell stories about ourselves. When students engage in critical reflection, the reflection can take the form of a narrative to communicate their assumptions and experience. As Chambers (2003, p. 404) contends, narrative writing aids the reflective process as it offers the writer time to ponder and construct their narrative in the way they see fit. As the writer pieces together the narrative in their minds, their time spent in reflection may cause them to edit the narrative or perceive the situation or experience that they are writing about differently. This makes the narrative writing process a creative and agentic

one, as the written reflection that is produced will be unique and representative of the individual's experience. However, this does not mean that narrative reflection must be presented in written form, as various modes (spoken, written, visual, etc.) can be used alone or in combination (multimodal) to construct a narrative reflection.

7.3.3 Conclusion Three: Critical Reflection arises from Questions that are Curated by Teachers but also Generated by Students

This study has revealed that curating questions with purpose and depth promotes critical reflection for our learners. Critical reflection and questioning are intrinsically linked, as questions spark the critical reflection process (Papaefstathiou & O'Grady, 2022, p. 105). Whether it is a question that is posed to them, or one that they pose to themselves during reflection, questioning helps learners to deeply probe their assumptions and the things they know and learn in the classroom. The verb 'curate' is used deliberately here, as this study has revealed that curated questions, in other words, questions that have been thoughtfully conceived, organised, and presented to learners, are powerful, as they are intentional in what they wish to achieve- critical reflection. In Violet's classroom, her pedagogy made use of questioning strategies to 'drill down' into the content or assumptions she was exploring with her students. As Violet (Initial Interview with Violet, 2022, lines 57-59) stated in her initial interview, "curating questions in class and like having question generating as a way of students thinking...[and] being aware of their own kind of power and agency," promotes critical reflection, and by extension, deep learning. The questions that are most powerful in sparking critical reflection are the 'why?' questions, because these compel the learner to justify their thinking and question deeply when they become alert to an assumption or perspective in their world. 'Why?' questions challenge assumptions and allow students to question the gaps in their knowledge, to then move through the process of reflection towards an outcome or action. To

consider the question of *'why?'* evokes rationality, as the teacher is looking to the learner to justify their response (whether this is a verbal or behavioural response) using some form of reasoning. When there is no rational answer, this becomes evident to both the learner and the teacher, who can then move towards deeper reflection and understanding.

'How' questions have a similar effect in promoting critical reflection, as they are often posed when considering a process or the idea of change. For example, “how might/did you do this?” or “how do you imagine this to look?” During her assessment of student learning at the end of the novel study on *Shooting Kabul* (Senzai, 2010), Dominique posed ‘how?’ questions to see if her students’ assumptions had changed after studying the text. Interestingly, it is the *'why?'* and *'how?'* questions that teachers pose at the beginning and end of a unit, often known as ‘big picture’ or conceptual questions, that have the potential to springboard critical reflection. These questions frame a unit and the learning to be achieved, both at a content and conceptual level, and provide a touchstone for teachers when formatively assessing student learning throughout. In this same way, these questions often appear in higher-order thinking activities, where students are learning to evaluate, analyse, or exercise critical thinking skills in their subject areas. Therefore, teachers who wish to prioritise the teaching of critical reflection with their Stage 4 learners can curate these questions to drive a unit of work.

Part of the 4Cs approach is empowering students to lead the learning in the classroom, which can be imagined through the act of generating questions. When students are asked to generate questions, the focus is no longer on the response but the process of questioning and developing the confidence to pose deep, thoughtful questions that can lead to critical reflection. In Violet’s classroom, question generation activities were already at the forefront of her pedagogy before entering this study. For Violet, leading students to understand that there can be more than one

answer to a question, especially when exploring complex problems, lies at the core of why she encourages questioning during learning. The strategies previously adopted by Violet flip the question-response model on its head to prioritise the questions that are posed. For example, 4Cs processes like ‘what is the question?’ provide students with the answer and invite them to find possible questions that might lead to it (Initial Interview with Violet, 2022, line 81). In Violet’s experience, this promotes deep thinking because it is far more challenging for students to work backwards and conceive questions rather than respond to them. When students are challenged to question, they are exercising their natural inclination to wonder and be curious, but also to think critically about what they are learning.

7.4 Phase Two of the Study

Phase Two of the study traverses the planning and teaching stage of the Geography and English units across both Year 8 classes. Observations were used as the main data collection tool during this phase of the study and were carried out across a period of two weeks, once teachers had begun teaching on their units. Fieldnotes were collected to document the learning that was being observed during these lessons. The data set was also supplemented with impromptu interviews conducted with students during memorable learning moments to contextualise the activities being observed by the researcher. After selected lessons, some teachers chose to debrief their lesson with the researcher, and this discussion is also reflected in the fieldnotes that were collated. Interview transcripts were transcribed using a software program called Descript (2024), before being coded manually by the researcher. All fieldwork notes and interview data were analysed using IPA, whilst student work samples that were collected and which featured in the discussion section of Chapter Five were examined using low-level thematic analysis.

Seven superordinate themes emerged from data analysis of this phase of the study. These themes are displayed in Master table B and are evidenced using a combination of verbatim interview quotes and hand-written fieldnotes. Student work samples and images of teaching materials used in each class have been incorporated to enrich the analysis and discussion of each theme. To begin Chapter Five, a found poem titled *Tourism kills tourism* illustrates a memorable learning sequence in Violet's Year 8 Geography classroom which was captured in the fieldnotes. This poem highlights the collective experience of the teacher and students as they work together to critically reflect on the impact of tourism during a lesson. This found poem illustrates the power of a learning sequence that adopts 4Cs processes used in combination with audio-visual materials and questioning strategies to evoke emotion, critical thinking, and spark the initial phases of critical reflection.

7.4.1 Conclusion One: Posing the Right Questions is Necessary for Critical Reflection

This study has demonstrated how critically reflective learning in the Stage 4 classroom is driven by questioning strategies which deepen student learning. The types of questions being posed by teachers across both Year 8 classrooms are telling, as they help to foster such a critically reflective learning environment. The question types that were found and that assisted students to practise critical reflection include:

- Open-ended questions: These questions go beyond the 'yes' or 'no' binary to support critical thinking by eliciting responses that are more encompassing and nuanced in nature. These questions can lead the lesson and set the learning intentions that are to be achieved during a lesson or across a series of lessons that aim to support students to critically reflect. For example: "How do I engage with technology?" (Observation notes for Violet's lesson on the 9th of June, 2022)

- Conceptual questions: Such questions are framed around key concepts that are to be explored. These questions promote conceptual learning, which is learning that draws upon higher-order thinking skills to invite students to engage with abstract concepts like ‘bravery’, ‘tourism’ and ‘courage’. This study has found that conceptual questions usually frame units of work across KLAs (and especially in HSIE subjects) and can be used as a starting point to plan for critical reflective learning. For example: “How does this poem show what we value in the Australian identity?”
- ‘*Why?*’ questions: These questions have a clear intention in asking the speaker to justify their answer, usually with reference to evidence or an assumption. ‘*Why?*’ questions provoke learners to think about what they know and challenge, evaluate and adapt their assumptions based on this critical reflection. These are the most powerful questions to pose to a learner, yet are also the most challenging for a learner to answer, as they require deep and often personal rationalisation. For example, “Why are they saying that?” (Posed in response to the Instagram post activity in Violet’s Year 8 Geography class) (Observation notes for Violet’s class on the 9th of June, 2022)
- Probing questions: Probing questions push students to go further during a line of questioning and invite them to ‘dig deeper’ to elaborate, explain or justify their responses. For example, “Why do you stand where you stand? (probing a student’s position in a horseshoe activity); “Can you expand on what you have said?” (inviting a student to expand on their response with detail), “Can you hear the passion? Can you hear the anger?” (directing students to notice different emotions from the writer of the Instagram post in one of Violet’s Geography lessons). (Observation notes for Violet’s lesson on the 9th of June, 2022)

Question poetry similarly became an intriguing tool for promoting student questioning in the classroom, whilst experimenting with poetry to critically reflect. When creating question poems, the questioning process was made visible to students, which is an important step in supporting them to ask deep and meaningful questions in the junior years, so that this skill becomes reflexive when they reach Stages 5 and 6. In Violet's class, question poems offered her students a way to harness the power of questioning to reflect about their study of ecotourism, which in turn assisted them to demonstrate their knowledge. The act of creating a question poem also provided a space where students could pose 'why?' questions about their topic of study and begin to contemplate these questions more deeply as they reflected on their learning of ecotourism thus far.

7.4.2 Conclusion Two: Building a Strong Group Dynamic enables Critical

Conversations to Occur

The importance of a building a strong group dynamic emerged across the findings in this phase of the study, as students collaborated during critically reflective learning sequences. The disparate collaborative experiences that were observed across both classes, although unexpected, were momentous in revealing the strong relationship between collaboration and critical reflection. Significantly, there was a stronger sense of collaboration and familiarity amongst the students in the Year 8 Geography class, as compared with the English class. In Year 8 Geography, students knew one another more personally and displayed a stronger willingness to work together, even if this meant diverging from their friendship groups. Comparatively, this was challenging for the learners in Year 8 English, as they were reluctant to work with people they did not sit with or did not know in the classroom. This observation was confirmed by Marcus, Dominique, and Jeremy alike, as they understood the challenge they

faced here. This challenge prompted Marcus and Dominique to trial teamwork activities and games to invite students to socialise and work with one another; a gradual yet fruitful process.

When working in groups during collaborative 4Cs processes like ‘verbal tennis’ or ‘speaking into the void’, the Year 8 Geography class demonstrated a routine with such processes. This is because students were able to arrange themselves into group formations with more ease and take the lead without needing excessive teacher direction from Violet, thereby showing a greater familiarity with the process having practised it before. Moreover, although there were some dominant speakers in the room, the maturity displayed during group activities was stronger and students were noticeably more engaged in their learning. The English class provided an important touchstone throughout this study, as students were just beginning the journey of getting to know each other, which made collaboration new and exciting, but also challenging as students returned to the classroom after a prolonged period of remote learning post-COVID. The initial hesitation around trialling 4Cs processes as a group was palpable, yet students slowly began to feel comfortable the more they were challenged to work with one another. Teachers like Dominique rose to this challenge and saw that this hurdle had to be overcome for students to effectively practise critical reflection. Consequently, critical reflection was slower to emerge in the English class, as students were still developing their ability to engage in teamwork, exercise focus, and make and express meaning together, rather than solely. This study reveals that collaboration works well when learners know each other and there is a focus on developing a strong group dynamic to support students as they engage in critical reflection.

An empowering and supportive group dynamic has the power to create a learning space where critical reflection can occur through perspective-taking and critical conversations. Perspective-

taking is effective when practised as a social exercise that exposes students to perspectives that are contrary to their own (Rios et al., 2003, p. 12). When executed well, this study has demonstrated how collaboration facilitates critical conversations and allows students to voice and challenge their assumptions by entertaining new perspectives through the content they are studying. A process that featured prominently throughout the study and enabled this for students in Year 8 Geography was ‘speaking into the void’. This 4Cs process relies upon the verbal sharing of ideas (or noticings) and POVs, whilst promoting social learning that is underpinned by careful observation, active listening, and physical cues. In Year 8 English, this process was trialled with mixed results but became a useful platform for students to share their opinions about strategies being used in class, like PEEL paragraph writing. Whilst in Year 8 Geography, this process was routinely used to share noticings during activities and voice assumptions about the perspective/s encountered. Overall, this collaborative process was one that stood out due to its effectiveness in creating a space where all voices were acknowledged, and students were engaged in agentic learning that fostered critical reflection.

7.4.3 Conclusion Three: Provocations Provoke Critical Reflection

A key finding in this phase of the study has shown the power of provocations in stimulating critical reflection for Stage 4 learners. When introduced to teachers in the planning session, the idea of a provocation as something that provoked a response from the learner provided a stimulus to begin the critical reflection process. Provocations like questions were most readily used by the teachers in this study when critically reflecting, especially ‘*why?*’ and ‘*how?*’ questions that provoked students to consider their reasoning for or against a particular topic. Some teachers went further to create provocations that were multimodal by blending different elements and stimuli to heighten the specific response they wished to provoke.

In Year 8 Geography, Violet used provocations to extend students worldview about technology and tourism through a variety of different stimuli, including poems, cartoons, statements, and videos. These provocations helped to draw out the emotional response that the teacher was seeking from their students, whilst also providing key moments of emotional learning where students could practise expressing how they feel towards the content and the exploration of different perspectives. For example, when looking at the effects of pollution due to tourism, Violet was evoking feelings of devastation, aversion, and a call to action from her learners. As Geography is a highly action-oriented subject (Lee & Kriewaldt, 2024), the desire to foster critical reflection to lead students towards actions that were more sustainable and discerning as future tourists was significant. The power of multimodal provocations was also realised through the teaching delivered in Violet's classroom, as she combined different mediums to provide a provocative and memorable experience to spark deep learning. The most notable example was the learning sequence illustrated in the found poem that opens Chapter Five, which blends music, a visual stimulus (image), a question, and verbal discussion to provoke critically reflective learning about the environmental impacts of tourism. This experience was purposeful, as each element of the provocation served a purpose and pushed students to think deeply about the concept they were engaging with. For example, the use of music served a dual purpose, as it was both used as a measurement of time for reflection and created an atmosphere that mirrored the despondent tone of the image, thereby shaping how students were interpreting the stimulus. Although time constraints made it challenging for teachers to plan more multimodal provocations throughout their units, their effectiveness in fostering critical reflection cannot be underestimated.

7.5 Phase Three of the Study

Phase Three of the study was marked by the final interviews that took place at the end of the study to allow teachers to reflect on their experiences of teaching critical reflection. In these final interviews, teachers were invited to reflect on the extent to which they were able to foster critical reflection in their Year 8 classrooms, what this looked and felt like during teaching and learning, and how they used or didn't use poetry as part of the study. Teachers spoke of memorable teaching and learning moments in their classrooms, many of which were fruitful in sparking critical reflection during learning. For those teachers who felt that critical reflection was not present in their classrooms, they were able to reflect why this occurred and how they might meet this challenge in the future.

A montage of interview quotes derived from Master Table C were used to compose the final found poem that features at the start of Chapter Six titled, *Critical reflections, Connections and the Ticking Clock*. This found poem highlights the data by foregrounding the moments where teachers expressed feelings or thoughts related to their experiences of teaching critical reflection in their Stage 4 classroom; a key sub-question this study sought to answer. An analysis of the final interview transcripts using IPA produced a list of emergent themes, which were then translated into the resulting seven superordinate themes that comprised Master Table C.

7.5.1 Conclusion One: Poetry is a Dynamic and Creative Tool for Critical Reflection

Poetry is not something that is often associated with critical reflection, yet its potential to spark and facilitate critical reflection for adolescent learners is limitless. This study has revealed how poetry can be used by Stage 4 teachers as both stimuli for reflection and as a medium through which reflection can occur, ultimately enriching and sparking critical reflection during

learning. To engage with poetic form, students must first understand its structure and language, and the way poems play with this to express meaning. Fortunately, when this study began at Moonstone HS, Year 8 were beginning a poetry unit in English, which assisted them in developing the prior knowledge required to challenge themselves through poetic experimentation with different poetic forms, including blackout poems, acrostics, and question poems.

Blackout poetry was used as a medium for reflection and creativity in Year 8 English, to support students in their study of Australian identity and values. Crafting blackout poems is a transformative way of reflecting, as students have the power to take the words on the page and change them to express a new message. Mackellar's (2021/1908) poem offered students a perspective of Australian identity that is entrenched in the natural landscape, a motif that resonated with many students. By engaging blackout poetry, Year 8 students were afforded a chance to take apart and reconstruct the language of the poem with new meaning, a process that is inherently creative, agentic, and reflective. The blackout poems that were produced highlight this transformative process. This type of poetry composition is effective because the words of the text also help to scaffold the process, as students are not forced to generate their own words to compose the poem. Yet, all students can be composers by engaging in this process. The cognitive challenge that arises from blackout poetry is the fact that it demands that learners both think about and think beyond the base text to craft new meaning. As they do this, they become immersed in the language of the text and begin to question certain words and phrases, seeing if they align with their new message. Although the blackout poems derived from this study were produced early on, before any explicit groundwork for critically reflective learning had taken place, they still demonstrate an effective method of reflection that can aid the teaching of this capability in secondary classrooms. Contrastingly, in Year 8 Geography, a

combination of acrostic and question poems were composed throughout the study to aid critical reflection. In Violet's classroom, the question poems offered a new way to engage with poetry writing which motivated students who lacked the confidence or experience to create a free verse poem. Question poetry helped the students ponder about the topic, which provided an authentic moment of reflection that was critically reflective. The acrostics that were produced by students were playful, thoughtful, and sometimes flippant, but helped students in their conceptual learning by identifying and reflecting on concepts like ecotourism. This would provide the groundwork for critical reflection around topics including the impacts of technology, technology and parenting, ecotourism, and sustainability.

Poetry as a stimulus that triggers critical reflection was experienced across both Year 8 classes. Although critical reflection did not eventuate fully in the Year 8 English class, the use of poetry and poem-like materials to stimulate conceptual and critical thinking about texts was effective. For example, Year 8 students' study of Paterson's (2008/1890) poem *The Man from Snowy River* to explore the notion of Australian identity and values from a traditional and patriarchal lens, stimulated critical conversations about the lack of female presence in the poem. Contrastingly, the song, *Sleep, Australia, Sleep* (Kelly, 2020), provided a sardonic lens through which students could evaluate Kelly's perspective on Australia's response to climate change and how this shapes our national identity. Violet's use of poem-like texts included songs and cartoons with verse, which acted as provocations for students. The most notable example, the cartoon with a section of verse titled *Mummy was busy* (Leunig, 2019), provoked students to respond to and justify their feelings and thoughts towards the stimulus which focused on parenting and technology.

7.5.2 Conclusion Two: Diverse perspectives are a conduit for effective critical reflection

A key finding of this study is centered on the notion of “unravel[ing] perspective as a concept,” which is highlighted in the found poem that opens Chapter Five. Perspectives are a vital conduit in this study, as they offer another lens through which the Year 8 classes have perceived knowledge in their subject, by engaging with worldviews that may or may not align with their own. This study foregrounded the exploration of diverse perspectives as an intention and invited teachers to find and explore diverse perspectives alongside students to critically reflect.

Violet’s teaching was intentional in its exploration of diverse perspectives about technology and tourism in Year 8 Geography, as she made it her mission to make this the focal point of her lessons. Violet (Final Interview with Violet, 2022, lines 114, 116, 117-118) quotes, “I was deliberate in, you know, looking at diverse perspectives...showing kind of counter perspectives...I was quite deliberate in creating opportunities for students to notice assumptions or to...grapple with it.” Violet understood that the assumptions that learners notice and reveal during critical reflection are contained within perspectives. The more diverse the perspectives being explored are, the deeper, thoughtful, and more stimulating the critical reflection will be. For Violet, provocations and other stimuli became powerful in scaffolding and breaking down the perspectives into manageable and relatable forms for students to engage with (for example, by using a cartoon or a song). Violet’s unit was primed for critically reflective learning from the start because of the richness of the perspectives she selected and showcased in her lessons. These perspectives allowed her students to enter moments of disorientation to inform, challenge, and adapt their assumptions about responsible and sustainable tourism (ecotourism). The emancipatory nature of Violet’s teaching deeply resonates with the work of Biesta (2012; 2017), who perceives the educational process as an “ongoing dialogue” between

the ‘self’ and ‘other’, “in which both are formed and transformed” (Biesta, 2012, p. 43). This process is contingent on the student encountering resistance during learning, such as the provocations Violet presents to her students to introduce new perspectives on a topic. This act of intentional teaching, where the teacher allows the student to encounter resistance, is fundamental to their formation as an agentic learner. As Biesta (2012, p. 43) suggests, “without the resistance of the child or student, they only appear as objects, but not as subjects in their own right.” Furthermore, Violet’s presence and power as the educator in the classroom is highlighted here (Biesta, 2017), as critically reflective learning is envisioned as a curated experience where the teacher intentionally selects and presents diverse perspectives to their students to teach this capability.

Although the subject of English is well suited to the exploration of diverse perspectives through textual study, it is the curation of quality core and mentor texts that make this possible. The perspectives explored in the Year 8 English classroom offered students a range of gender, cultural, political, and social perspectives to fuel their critical thinking and critical reflection around the concept of Australian identity. Text selection was a motif that emerged across the final interviews conducted with Dominique, Marcus, and Jeremy in the study, thereby cementing it as an important foundation for critically reflecting in the subject of English. For most English teachers, this is already common knowledge and at the forefront of their pedagogy, which primes this subject for critically reflective learning better than most. In Year 8 English, the array of texts and perspectives explored were compared to draw out the diversity in what Australians value and how they perceive their Australian identity. As students challenged their assumptions about what it means to be Australian, they were concurrently learning about themselves and what they valued as individuals, which opened opportunities for student perspectives to enter the conversation and enrich the learning taking place. The

relevance of the perspectives being explored was also significant, as the extrinsic motivation produced by the content and its presentation was enough to arouse students' curiosity and engage them in their learning. This is why the song snippets from the Aboriginal artist Baker Boy were favourably received by the Year 8 Geography students and worked effectively as provocations in Violet's 'Interconnections' unit. Moreover, the inclusion of such songs, which blended English and Aboriginal languages, offered students a cultural lens through which to consider what their own personal narratives would look and sound like.

7.5.3 Conclusion Three: Entering 'The Learning Pit' is Part of Critical Reflection

This study reveals a clear link between the moment of challenging learning experienced during critical reflection and the moment of disorientation, uncertainty, and/or frustration that learners experience when they enter 'the learning pit' (Nottingham, 2016). The concept of 'the learning pit' (Nottingham, 2016) arose in conversation with Marcus during his final interview, to explain the challenging style of learning that he and his colleagues were trying to foster in their lessons.

When students stepped out of their comfort zones to participate in collaborative games with Marcus and Dominique at the beginning of the poetry unit, they experienced this phenomenon. To help foster stronger relationships and teamwork amongst this Year 8 class, Marcus invited students to collaborate in 4Cs team-building games like '21'. The initial attempts to collaborate to get to the number 21 without two people speaking the same number at once was extremely challenging for this group, as many students became frustrated and disoriented by their collective failure. Dominique, seeing their collective frustration, invited the class to consider why they were unable to get to 21, with many students seeing that their propensity to rush and miss facial cues from one another contributed to this. Once students paused and reflected on how to work as a team to get to the number 21 faster, they were able to complete the game

successfully and climb out of the learning pit this activity created. Ultimately, students were challenged to work as a team, and despite their failures, they succeeded by reflecting, re-evaluating, and adapting their strategy, which demonstrated critical reflection. Both Dominique and Marcus' reflection demonstrated that students in this Year 8 English class needed to experience moments of discomfort, especially when developing their analytical thinking and writing skills. As Marcus (Interview with Marcus, 2022, lines 388-389) crucially explained, these moments of discomfort became like a diagnostic tool that he and Dominique could use to pinpoint where the gaps in student learning lay and map out a plan to support them to exit the pit. As Nottingham argues (2016), students will inevitably encounter challenges or obstacles in their learning and must sit with the discomfort that these challenges create in order to overcome them and achieve success. To exit the pit during critical reflection, students must ask questions including 'why?' and 'how?' to evaluate their actions and work collaboratively to adapt them.

7.6 Limitations

This study was conceived and undertaken during a challenging period of global unrest and economic and political volatility due to the COVID-19 pandemic. These conditions inevitably limited the scope of the study by impacting on the recruitment process. Only one school was recruited into this study and the social, economic and political conditions people were facing at the time limited the number of teachers who volunteered to participate. As such, the findings of this study represent the views of teachers working within Moonstone HS and cannot be generalised to represent how other teachers define and experience critically reflective teaching and learning. Although these findings are not generalisable, they do offer insight into how teachers can use the 4Cs approach to understand and teach this capability more broadly, even

if they are not working in a school that adopts the 4Cs approach (Jefferson & Anderson, 2017, 2021a).

Another limitation posed was the fact that the unit planning session could not be conducted on the school site due to COVID-19 social distancing restrictions. Whilst this planning session did take place remotely on Zoom, teachers were still able to collaborate with one another and work with me to undertake this learning before the study began. Time restrictions throughout the school day limited the duration of the planning session to two hours, which made it challenging to provide teachers with enough consultation time during the session where they could guide me through their programs and present their ideas. Consequently, this meant that the teachers worked more collaboratively with one another to share ideas and seek feedback in the interim before the fieldwork began.

7.7 Implications and Directions for Future Research

Teaching students to critically reflect fundamentally prepares them for lifelong learning and the world beyond the classroom. The significance of this study and the conclusions it draws from the findings are pertinent to educators who wish to teach critical reflection to promote student agency, metacognition, decision-making, and social and emotional learning (Jefferson & Anderson, 2017, 2021a). The findings that have emerged from this study will be directly relevant to educators of high school students, particularly those working within Australian schools that have adopted Jefferson and Anderson's (2017, 2021a) 4Cs approach. This study will bring secondary educators of critical reflection closer to this phenomenon so that they can develop the knowledge and confidence to teach it and recognise it in their classrooms. By revealing how critical reflection is programmed, taught, and experienced by teachers and learners, this phenomenon can cease to become theoretical and be imagined in distinct, teachable, and replicable ways by educators.

When students critically reflect, they turn their assumptions about the world into actionable knowledge by re-solving assumptions that may be limited or misinformed. This promotes metacognition, so that students use pedagogical tools like the LDW to discuss their learning and how they can build competencies that will support them to critically reflect (Jefferson & Anderson, 2021a, p. 78). Developing students' metacognition enables them to reflect on their thinking and become alert to their emotions, particularly when learning to identify their feelings and regulate the impact of excessive or harmful emotions. As an adolescent, this emotional learning is paramount as the learner grows and changes both physically and psychologically throughout their schooling lives. This similarly builds resilience and grit, as the learner moves through challenging situations in life that warrant self-reflection and self-evaluation. Furthermore, students improve their confidence in their own learning, thereby empowering them with the agency to “monitor, manage, and evaluate” themselves in any given situation (Jefferson & Anderson, 2021b, p. 78). This study chose to situate itself within a Stage 4 (Year 8) learning context because it is pivotal that critical reflection is nurtured in learners from an early age, so that they reap the benefits throughout and after they complete their secondary schooling careers. By teaching critical reflection in Stage 4, students who are starting their high school journey will understand and develop the competencies that can empower them to make positive change for themselves and others in their lives.

Collaboration and effective communication lie at the heart of critical reflection and present another opportunity for learners to develop key social and communicative skills. In this study, the importance of teamwork was revealed as a foundational competency that Year 8 students required to effectively critically reflect. For example, as students developed their teamwork skills through collaborative processes in Year 8 English, they learnt how to openly, reciprocally, and respectfully communicate with one another, both as speakers and listeners. These skills are

exercised during critical reflection, as the learner must navigate complex situations, emotions, and perspectives that may not always align with their own. Fostering such social skills crucially provides students with opportunities to problem-solve, think critically, debate, and exchange ideas in a safe environment with guidance from their teacher. As revealed in this study, this promotes student voice and self-expression, which fuels creativity in the classroom.

As an agentic capability, critical reflection has the transformative capacity to empower our students. In their publication, Jefferson and Anderson (2021b, p. 57) pose the following question: “Does schooling offer opportunities to act in the real world?” This question invites educators to consider how 4C capabilities like critical reflection can equip students with the agency and awareness to take control of their actions and positively shape their lives. Therefore, the implications of this study for educators are connected to how schools can develop agentic learners who feel empowered in their learning and see its relevance beyond the classroom. To “act” in the real world, students require more than just an understanding of curriculum content (Jefferson and Anderson, 2021b, p. 57). They need the capability to take what they know and learn in the classroom, and consider, question, evaluate, and employ this knowledge to inform their thinking and actions. When students critically reflect, they learn how to take responsibility for their actions and evaluate the impact of these actions on themselves and those around them. By teaching critical reflection, educators awaken students to their social responsibility and prepare them for civic engagement as young members of their school and broader communities. This was evidenced in this study through the learning undertaken by students in Violet’s Year 8 Geography class, who understood the relevance of the ‘Interconnections’ unit for their emerging roles as users of technology and their responsibility as future tourists.

By examining the experiences of teacher participants in their journey to teach critical reflection, this study offers prospective teachers of critical reflection a roadmap for how a pedagogy of critical reflection that aligns itself with a 4Cs approach can be imagined. Notably, the words of Béres and Fook (2020, p. 15) resonate with this sentiment, as they propose that “the first absolutely necessary condition for critical reflection is a learning environment, which facilitates reflection.” This implies that the critically reflective learning environment that is fostered in any classroom must be one that values and encourages “self-challenge and self-learning” (Béres & Fook, 2020, p. 15). With this consideration in mind, the following points outline the core components of a pedagogy of critical reflection that is informed by Jefferson and Anderson’s (2017, 2021a) 4Cs approach:

Teaching must plan for and program critical reflection in a purposeful way so that there is continuity in the development of this capability across a series of lessons or unit of work.

When planning for critical reflection, teachers should consider the curriculum content and the ‘big picture’ or overarching questions they wish to ask and solve alongside their learners. These same questions can function as provocations for critical reflection, to guide teachers towards key ideas, concepts or issues that are relevant to students that could be probed and evaluated further. In this study, the use of poetry as a stimulus and a reflective tool was programmed into the units of work, but also arose from conversations with teachers in post-lesson debriefs where opportunities to trial different poetic forms as mediums for reflection were discussed. Programming for critically reflective learning should be done sequentially, so that students are given multiple opportunities to practise critical reflection once they understand the capability and its coherence maker.

Learning about the capability of critical reflection using a 4Cs approach offers a transformative way to conceptualise and teach it to students.

In a 4Cs approach, critical reflection is most effective when practised in tandem with the other 4C capabilities (collaboration, communication and creativity) and the competencies in the LDW. The impact of critically reflective learning on the Year 8 students in this study was shaped by their engagement with this capability as it is imagined and theorised through the Crucible coherence maker, the LDW, and the pedagogical processes that form the 4Cs approach. This necessitates that critical reflection is not taught in isolation, but together with the other 4C capabilities so that its transformative effects are felt. Furthermore, learning ‘about’ critical reflection and its coherence maker is just as important as learning ‘through’ it when adopting a 4Cs approach, so that students understand why it is relevant and how it can be practised.

The teaching and learning of critical reflection in a 4Cs approach must occur using the critical reflection Crucible coherence maker.

The Crucible offers a four-step process for how critical reflection is taught through the 4Cs approach. Each step of the coherence maker scaffolds the skills that are performed by the learner to critically reflect and must be practised sequentially so that this is achieved. Although the Crucible supports the teaching of critical reflection, it is not prescriptive in the way each step is taught. This was revealed in this study through the 4C processes used by teachers to support students to identify their assumptions and question alternate perspectives in their units. Furthermore, students should be encouraged to become familiar with how the Crucible looks, so that it can be both conceptually and tangibly understood. The Year 8 students in Violet’s Geography class demonstrated this by personalising their Crucible drawings before writing

ideas and questions into the space within the Crucible that they wished to ‘test’ during that lesson.

The teaching of critical reflection must be scaffolded so that students are supported to approach each stage of the Crucible, and as they enter and remerge from these challenging learning experiences.

Supporting students as they move through each of the four steps of the Crucible is pivotal for critical reflection to occur. As Hammond and Gibbons (2005) propose, scaffolding can be planned during programming (designed-in), so that there are timely and appropriate opportunities for learners to receive explicit support with the knowledge and skills required to critically reflect. This could include creating questioning strategies to help students think critically and respond to ‘why?’ and ‘how?’ questions on a topic. This was evidenced in the study where teachers modelled examples of critical questioning or provided students with opportunities to identify the assumptions of others, to support them to express their own. Alternatively, if the need arises during a lesson, contingent scaffolding can be employed by the teacher to provide individual assistance to learners who require it. This is particularly valuable when students enter the final two steps of the Crucible where they challenge their assumptions and begin to re-solve their understanding, as this is more challenging.

The teaching and learning of critical reflection must involve and gain insight from the students themselves to shape and continuously improve future lessons that seek to foster this capability.

Since a key aim of critical reflection is to foster increased agency amongst students, the teaching and learning of this capability must actively involve students. In this study, student input resulted from the feedback that students provided about their learning of 4C processes,

including the teamwork activities that Year 8 English participated in with Marcus and Dominique. In Year 8 Geography, students were asked about their ideas and feelings about critical reflection and how this has changed after participating in the study. This helped Violet to assess the initial gaps in their understanding and adopt their feedback to revise future units. More generally, student input may also appear in the form of student questions that drive or shape future lessons or by offering students more choice over the texts being studied in English and other KLAs where possible.

The teachers in this study have demonstrated how critical reflection can be imagined in the Stage 4 classroom both creatively using poetry and through stimuli that incorporate a range of diverse narratives and perspectives. Critical reflection is a capability that requires scaffolding, like any learning experience, and the groundwork that is paved for this social and emotional learning to occur is pivotal. Here, a high challenge, high support pedagogy (Hammond, 2001) is promoted as one that will support students as they enter ‘the learning pit’ (Nottingham, 2016) and re-emerge with renewed understanding and knowledge. For educators of critical reflection, the following question may serve to guide future research on this matter: How can critical reflection be taught to diverse learners so that they can engage with this capability with success? This question encompasses both primary and secondary aged students and includes both the linguistically and culturally diverse learners that Hammond’s (2001, 2006) high challenge, high support pedagogy is targeted towards, and students with disabilities and other complex learning needs.

As a result of these findings, teachers of critical reflection now have a developing bank of questioning strategies that can be used to stimulate this learning. In previous research conducted by Papaefstathiou & O’Grady (2022), the correlation between questioning and

critical reflection was argued as being significant and vital to this learning process. In this study, questioning has again reemerged as a crucial theme, with a specific focus on the process of curating questions that are purposeful and can provoke critical reflection. These questioning strategies will inspire teachers and offer them a starting point from which to experiment with questioning in their classrooms, whilst also offering them strategies for question generation that will invite their students to become active participants in the questioning stage of critical reflection. I am hopeful that this study will incite future research that places a stronger focus on question generation by learners and asks how they can learn to ask the right questions when they critically reflect.

The methodological implications of this research are insightful to educational scholars who see the value and potential of multimethod research. This study adopted hermeneutic phenomenology as one of its methodologies (Heidegger, 1962) due to the complex and inherently interpretive nature of the phenomenon being explored. For researchers of phenomenology who are concurrently working within an educational research context, I hope this research offers insight into how phenomenology can bring teachers closer to the complexity of phenomena experienced in their classrooms, including critical reflection. The methodological pairing of hermeneutic phenomenology with poetic inquiry in this study will model how future multimethod research in educational contexts can take shape when two qualitative methodologies are combined in this way. Additionally, the use of IPA (Smith et al., 2009) in this study allowed for a richer exploration of the idiosyncrasies of critical reflection as it was experienced by teachers and students. Therefore, this study offers educational scholars a detailed and authentic picture of how an IPA approach can be employed to collect and analyse data that demonstrates how phenomena like critical reflection can emerge and be observed during teaching and learning in secondary classrooms.

Chapter Conclusion

This chapter has summarised the main research findings and conclusions that can be drawn from each phase of the study. The limitations of the study were outlined before a discussion of the implications were presented. This study is pertinent for both teachers and educational scholars who wish to understand how the phenomenon of critical reflection is experienced and taught by teachers in a high school setting that adopted a 4Cs approach (Jefferson & Anderson, 2017, 2021a). This study is also valuable for teachers who wish to experiment with creative ways of fostering critical reflection in their classrooms using poetry as a stimulus for reflection and reflective tool. Finally, this study will orient future research on the topic of critical reflection in adolescent education and provide a starting point for teachers in their adoption of a critically reflective pedagogy.

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Appendix A

Human Ethics Approval Letter from The University of Sydney HREC



THE UNIVERSITY OF
SYDNEY

Research Integrity & Ethics Administration
HUMAN RESEARCH ETHICS COMMITTEE

Tuesday, 27 July 2021

Prof Michael Anderson
School of Education and Social Work Research Operations; Faculty of Arts and Social Sciences
[REDACTED]

Dear Michael,

The University of Sydney Human Research Ethics Committee (HREC) has considered your application. I am pleased to inform you that after consideration of your response, your project has been approved.

Details of the approval are as follows:

Project No.: 2021/485
Project Title: Critical reflection; A poeticising venture: The experiences of four, Stage 4 teachers and their students as they embrace the possibilities of a critically reflective pedagogy
Authorised Personnel: Anderson Michael; O'Grady Alison; Papaefstathiou Vasiliki;
Approval Period: 27 July 2021 to 27 July 2025
First Annual Report Due: 27 July 2022

Documents Approved:

Date Uploaded	Version Number	Document Name
09/07/2021	Version 2	PIS (child) clean copy
09/07/2021	Version 2	PIS (parent/carer) clean copy
09/07/2021	Version 2	PIS (general) clean copy
31/05/2021	Version 1	PCF Parent/carer
31/05/2021	Version 1	PCF Child (Student)
31/05/2021	Version 1	Safety protocol
31/05/2021	Version 1	Letter to the principal
31/05/2021	Version 1	Observation Schedule
31/05/2021	Version 1	PCF General
31/05/2021	Version 1	Interview Schedule

Condition/s of Approval

- Research must be conducted according to the approved proposal.
- An annual progress report must be submitted to the Ethics Office on or before the anniversary of approval and on completion of the project.
- You must report as soon as practicable anything that might warrant review of ethical approval of the project including:
 - Serious or unexpected adverse events (which should be reported within 72 hours).
 - Unforeseen events that might affect continued ethical acceptability of the project.
- Any changes to the proposal must be approved prior to their implementation (except where an amendment is undertaken to eliminate *immediate* risk to participants).
- Personnel working on this project must be sufficiently qualified by education, training and experience for their role, or adequately supervised. Changes to personnel must be reported and approved.
- Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, as relevant to this project.

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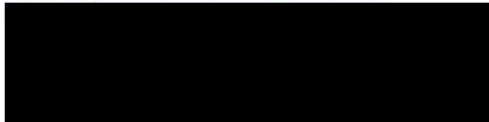


- Data and primary materials must be retained and stored in accordance with the relevant legislation and University guidelines.
- Ethics approval is dependent upon ongoing compliance of the research with the *National Statement on Ethical Conduct in Human Research*, the *Australian Code for the Responsible Conduct of Research*, applicable legal requirements, and with University policies, procedures and governance requirements.
- The Ethics Office may conduct audits on approved projects.
- The Chief Investigator has ultimate responsibility for the conduct of the research and is responsible for ensuring all others involved will conduct the research in accordance with the above.

This letter constitutes ethical approval only.

Please contact the Ethics Office should you require further information or clarification.

Sincerely,



Dr Haryana Dillon
Chair
Human Research Ethics Committee (HREC 3)

The University of Sydney of Sydney HRECs are constituted and operate in accordance with the National Health and Medical Research Council's (NHMRC) [National Statement on Ethical Conduct in Human Research \(2018\)](#) and the NHMRC's [Australian Code for the Responsible Conduct of Research \(2018\)](#)

Human Ethics Approval Letter from NSW Department of Education SERAP

| NSW Department of Education

Miss Vasiliki Papaefstathiou
[REDACTED]

DOC21/874062
SERAP 2021196

Dear Miss Papaefstathiou

I refer to your application to conduct a research project in NSW government schools entitled *Critical reflection; A poeticising venture: The experiences of four, Stage 4 teachers and their students as they embrace the possibilities of a critically reflective pedagogy*. I am pleased to inform you that your application has been approved.

You may contact principals of the nominated schools to seek their participation. **You should include a copy of this letter with the documents you send to principals.**

This approval will remain valid until 26 October 2022.

The following researchers or research assistants have fulfilled the Working with Children screening requirements to interact with or observe children for the purposes of this research for the period indicated:

Researcher name	WWCC	WWCC expires
Vasiliki Papaefstathiou	[REDACTED]	[REDACTED]

I draw your attention to the following requirements for all researchers in NSW government schools:

- The privacy of participants is to be protected as per the NSW Privacy and Personal Information Protection Act 1998.
- School principals have the right to withdraw the school from the study at any time. The approval of the principal for the specific method of gathering information must also be sought.
- The privacy of the school and the students is to be protected.
- The participation of teachers and students must be voluntary and must be at the school's convenience.
- Any proposal to publish the outcomes of the study should be discussed with the research approvals officer before publication proceeds.
- All conditions attached to the approval must be complied with.

When your study is completed please email your report to: det.serap@det.nsw.edu.au. You may also be asked to present on the findings of your research.

I wish you every success with your research.

Yours sincerely

[REDACTED]
Rachel Smith
Director, Strategic Analysis and Research
Centre for Education Statistics and Evaluation
25 October 2021

education.nsw.gov.au
Strategic Analysis And Research
Centre For Education Statistics And Evaluation
NSW Department Of Education
105 Phillip Street, Parramatta NSW 2150 | GPO Box 33, Sydney NSW 2001
Email: det.serap@det.nsw.edu.au



Appendix B

Participant Information Forms (General)



THE UNIVERSITY OF
SYDNEY

Sydney School of Education and Social Work
Faculty of Arts and Social Sciences

ABN 15 211 513 464

PROFESSOR MICHAEL ANDERSON

Professor of Education (Arts and Creativity)

Room 807

Education Building A35

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NSW 2006 AUSTRALIA

Telephone: +61 2 93517810

Facsimile: +61 2 93514580

Web: <http://www.sydney.edu.au/>

Critical reflection; A poeticising venture: The experiences of four, Stage 4 teachers and their students as they embrace the possibilities of a critically reflective pedagogy

PARTICIPANT INFORMATION STATEMENT

(1) What is this study about?

You are invited to take part in a research study about the phenomenon of critical reflection and how it can be fostered during teaching and learning in the Stage 4 classroom. In Jefferson and Anderson's (2017) 4Cs model, critical reflection is an important capability because it allows students to think *why* and *how* they form assumptions about knowledge and deeply consider the perspectives they encounter in the classroom- including their own. This study will collect data about how critical reflection can be taught to Stage 4 students using the 4Cs, which will valuably assist Australian high schools to understand, practise and embed this transformative capability more clearly into their pedagogy and professional practice.

In this study, you will experiment with a critically reflective pedagogy with a Stage 4 class of your choosing. Since this research will use the 4Cs model to frame how teachers and students practise critical reflection, you will use the teaching tool, the critical reflection crucible, to scaffold your teaching and learning strategies. This research recognises that the 4Cs are most powerful when interconnected, thus, you will be encouraged to use poetry as a creative/reflective tool to engage your students in the critical reflection process and guide them to explore the content from multiple perspectives, narratives and/or voices.

To do this, you will newly design a unit of work (or modify a pre-existing one) on a curriculum topic of your choosing and teach it to your chosen Stage 4 class using a critically reflective pedagogy. This unit of work will run for 3-4 weeks in total and the researcher will be available to support you to plan and consider the teaching and learning strategies that you might use. The researcher will conduct short interviews with you before and at the conclusion of the study to discuss your knowledge of and experience teaching critical reflection. Classroom observations will also provide opportunities for the researcher to see your pedagogy in action and examine students' learning experiences more authentically.

You have been invited to participate in this study because you are a Stage 4 teacher who is currently adopting the 4Cs teaching and learning model in your school. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary.

By giving your consent to take part in this study you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree to take part in the research study as outlined below.
- ✓ Agree to the use of your personal information as described.

You will be given a copy of this Participant Information Statement to keep.

(2) Who is running the study?

The study is being carried out by the following researchers:

- Miss Vasiliki Papaefstathiou, The University of Sydney, Sydney School of Education and Social Work
- Professor Michael Anderson, The University of Sydney, Sydney School of Education and Social Work

Vasiliki Papaefstathiou is conducting this study as the basis for the degree of Doctor of Philosophy (Arts and Social Sciences) undertaken at The University of Sydney. This will take place under the supervision of Professor Michael Anderson and Dr Alison O'Grady.

(3) What will the study involve for me?

To begin, you will participate in one semi-structured, recorded interview (30 to 40 minutes in length) with the researcher at the start and at the conclusion of the study. This will allow you to share your knowledge and teaching experience about critical reflection and consider how your experiences and understanding has changed as a result of your participation in this research. These interviews will be conducted on the school site in a quiet location, at a time most suitable to you. In the event that an in-person interview cannot be conducted, a Zoom alternative will be made available to you. You will have the opportunity to review the interview transcripts or recordings. If you do not wish to have the interview recorded, this option will be made available to you. You will be asked to attend two to three pre-arranged Zoom meetings with the researcher and other fellow teacher participants to begin planning your unit. During these Zoom sessions, you will also have the chance to discuss and plan your approach, share your expertise, ask questions and consider the ways that you could integrate poetry into your teaching and learning strategies. These Zoom meetings will range from one to two hours in length.

During the study, you and your chosen Stage 4 class will be involved in two to three classroom observations. These classroom observations will take place at a pre-arranged time decided upon by you and the researcher. Observations made by the researcher during this time will be documented by hand in the form of field notes, or audio-recorded if an impromptu interview is conducted with a student. The purpose of the classroom observations is to allow the researcher to observe your critically reflective pedagogy in practice and see the types of classroom talk, questions, and/or activities that you might use to begin the critical reflection process with your students. It also provides the researcher with a valuable opportunity to see how students critically reflect and express their assumptions. During these classroom observations, the researcher may conduct brief, impromptu interviews with one or more students in

your class. These audio-recorded interviews are designed to allow the researcher to look more deeply into the teaching and learning that is taking place, especially if they notice something curious, interesting or significant happening during an observation period. Before beginning an interview with a student, the researcher will seek verbal consent from the student. If the student does not wish to have their interview audio-recorded, this option will be made available to them. It is also important to note that a student can take place in a scheduled classroom observation and not consent to an impromptu interview during class time. However, a student cannot consent to an impromptu interview unless they also consent to being observed during a scheduled classroom visit, since they will need to be in the classroom for this interview to potentially occur.

Finally, the researcher will collect student work samples that demonstrate critically reflective learning throughout this study. These work samples will help the researcher to see how students demonstrate critical reflection through their learning, especially through the creation of student poems. You will be encouraged to support students to use poetry and poem-writing as a critically reflective tool during this research, to help students express their assumptions and perspectives in creative ways.

(4) How much of my time will the study take?

The study will take place over three to four weeks and will take up approximately 16.5 hours of your time, as you plan, deliver and participate in interviews concerning your unit of work. During this time, you will participate in three Zoom sessions that will take six hours in total. The two, semi-structured interviews will take approximately one hour each and there will be at least three hours of classroom observations completed over two to three designated lessons. Reading aloud and distributing the participant information statements to your students (and copies for parents/carers) should take approximately twenty to thirty minutes. Collecting signed student and parent/carer consent forms, making photocopies, and providing the originals to the researcher will take approximately two hours. You will also be required to create a list of student participants with an attached photo and provide this to the researcher, which will take approximately one hour. The collection of work samples will occur intermittently throughout the study. Collecting, de-identifying and copying any student work will take approximately one to two hours.

(5) Who can take part in the study?

Three to four teacher participants and their respective Stage 4 classes can take part in this research study. Your suitability as a participant in this study is based on the following criteria:

1. You are a secondary teacher who will be assigned a teaching load of at least one Stage 4 class (year 7 or 8) in 2022.
2. Have a working knowledge of Jefferson and Anderson's (2017) 4Cs framework for Transformative Learning and are beginning to implement it into your pedagogy and professional practice.
3. Have a good understanding of the teaching tool, the critical reflection crucible, to deliver content to your Stage 4 classes.
4. Wish to experiment with critically reflective pedagogy in a Stage 4 unit of work.
5. Wish to experiment with poetry as a creative tool to encourage critically reflective learning in your Stage 4 classroom.

(6) Do I have to be in the study? Can I withdraw from the study once I've started?

Being in this study is completely voluntary and you do not have to take part. Your decision whether to participate will not affect your current or future relationship with the researchers or anyone else at the University of Sydney.

You can choose to withdraw from lesson observations or refuse to produce student work samples at any time. You are free to stop an interview at any time. Unless you say that you want us to keep them, any recordings will be erased and the information you have provided will not be included in the study results. You may also refuse to answer any questions that you do not wish to answer during an interview.

If you decide to take part in the study and then change your mind later, you are free to withdraw at any time. You can do this communicating with the researcher Vasiliki Papaefstathiou via email at [REDACTED]. If you decide to withdraw from the study, we will not collect any more information from you. Any information that we have already collected, however, will be kept in our study records and may be included in the study results.

(7) Are there any risks or costs associated with being in the study?

One potential risk that may arise during this study is the discussion of potentially sensitive ideas or controversial perspectives. These ideas or perspectives would normally arise in the classroom during natural conversation about curriculum content, for example, when discussing opinions about the causes of the Arab-Israeli conflict. This is considered potentially sensitive as it may produce strong feelings in students as they encounter and share their perspectives and assumptions during a lesson. Therefore, teaching approaches surrounding any contentious topics in the classroom must be approached in a sensitive, objective and balanced manner, as outlined in section 1.1 of the Controversial Issues in Schools Procedures (2017). The time cost will be minimised in this study through time constraints placed on the two interviews and the number of classroom observations that are conducted (three in total). The semi-structured interview schedule will also be limited to eleven questions to allow for this.

(8) Are there any benefits associated with being in the study?

This study will be mutually beneficial for both you and your school. By participating in this study, you will be offered the opportunity to deeply reflect on your pedagogy, and the extent to which you can support and encourage your students to critically reflect in creative ways. This will in turn assist the researcher to gain a deeper understanding of this phenomenon, to assist your school in evaluating the effectiveness of teaching critical reflection using the 4Cs model.

(9) What will happen to information about me that is collected during the study?

Your information will be stored securely in a padlocked safe in Professor Michael Anderson's office in the Education Building at the University of Sydney. This includes any student work samples you provide, field notes, and written transcriptions of the interview proceedings that take place. Electronic data including audio-recorded interviews will be stored securely on OneDrive, a university approved data storage platform. Once the study concludes, all electronic data will be stored on the University of Sydney Research Data Store. All data will be stored for a minimum period of five years following the study before it is destroyed. Your identity and information will be kept strictly confidential, except as required by law. The information collected from you will only be accessed by the researcher (Vasiliki Papaefstathiou), the chief investigator (Professor Michael Anderson) and the secondary supervisor (Dr Alison O'Grady). The

results of this study will be published in a PhD thesis and any future papers concerning this research, but you will not be individually identifiable in these publications. By providing your consent, you are agreeing to us collecting personal information about you for the purposes of this research study. Your information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise.

(10) Can I tell other people about the study?

Yes, you are welcome to tell other people about the study.

(11) What if I would like further information about the study?

When you have read this information, Vasiliki Papaefstathiou will be available to discuss it with you further and answer any questions you may have. If you would like to know more at any stage during the study, please feel free to contact Vasiliki Papaefstathiou at [REDACTED]

(12) Will I be told the results of the study?

You have a right to receive feedback about the overall results of this study. You can tell us that you wish to receive feedback by ticking the relevant box in the consent form. This feedback will be in the form of a one to two-page lay summary and will include the research report if desired. You will receive this feedback after the study is finished.

(13) What if I have a complaint or any concerns about the study?

Research involving humans in Australia is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved by the HREC of the University of Sydney [2021/485]. As part of this process, we have agreed to carry out the study according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect people who agree to take part in research studies.

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact the university using the details outlined below. Please quote the study title and protocol number.

The Manager, Ethics Administration, University of Sydney:

- **Telephone:** +61 2 8627 8176
- **Email:** human.ethics@sydney.edu.au
- **Fax:** +61 2 8627 8177 (Facsimile)

This information sheet is for you to keep

Participant Information Forms (Easy English- Child)



THE UNIVERSITY OF
SYDNEY

Sydney School of Education and Social Work
Faculty of Arts and Social Sciences

ABN 15 211 513 464

PROFESSOR MICHAEL ANDERSON
Professor of Education (Arts and Creativity)

Room 807
Education building A35
The University of Sydney
NSW 2006 AUSTRALIA
Telephone: +61 2 93517810
Facsimile: +61 2 93514580

Web: <http://www.sydney.edu.au/>

Study Information Sheet:

Critical reflection; A poeticising venture: The experiences of four, Stage 4 teachers and their students as they embrace the possibilities of a critically reflective pedagogy



Hello. Our names are Vasiliki Papaefstathiou and Michael Anderson.

We are doing a research study to find out more about how students and teachers critically reflect when they learn at school. This involves asking **why?** and **how?** you know the things that you know, and how this affects the different things that you learn in your subjects.

We are asking you to be in our study because of the following reasons:

1. You are a high school student in year 7 or year 8 (Stage 4).
2. You attend a high school that uses the 4Cs model of Transformative Learning, created by Michael Anderson and Miranda Jefferson in 2017.
3. Your classroom teacher has been invited to participate in our research study to understand how Stage 4 teachers and students critically reflect during teaching and learning.
4. You are learning to critically reflect as part of the work that you do in your class

You can decide if you want to take part in the study or not.
You don't have to - it's up to you.

This sheet tells you what we will ask you to do if you decide to take part in the study. Please read it carefully so that you can make up your mind about whether you want to take part.

If you decide you want to be in the study and then you change your mind later, that's ok. All you need to do is tell us that you don't want to be in the study anymore.

If you have any questions, you can ask us or your family or someone else who looks after you. If you want to, you can email Vasiliki using this email address:



What will happen if I say that I want to be in the study?

If you decide that you want to be in our study, we will ask you to do these 3 things:

- Participate in a classroom observation. The researcher, Vasiliki Papaefstathiou, will come to visit your class to see how you learn to critically reflect with your teacher and peers. This will occur during two or three timetabled lessons that you have with your teacher. All you have to do is come to class and be ready to learn.
- Participate in a short interview with Vasiliki Papaefstathiou while you're learning in class. If you say it's ok, we will record what you say with a tape recorder. You might be asked a few simple questions about the work that you are doing in class, in one or more of the lessons that Vasiliki will come to visit on the day. Vasiliki will always ask you if it's ok to interview you before you are asked any questions.
- Ask your permission to collect some of your classwork. Your teacher will ask you if you want to include some of your classwork in the study, so that the researchers (Vasiliki and Michael) can see how you critically reflect. All you have to do is decide what classwork you want to include, and your teacher will make a copy of it and give it to Vasiliki.

When we ask you questions, you can choose which ones you want to answer. If you don't want to talk about something, that's ok. You can stop talking to us at any time if you don't want to talk to us anymore.

Will anyone else know what I say in the study?



We won't tell anyone else what you say to us, except if you talk about someone hurting you or about you hurting yourself or someone else. Then we might need to tell someone to keep you and other people safe.

All of the information that we have about you from the study will be stored in a safe place and we will look after it very carefully. The digital information we collect from you will be stored on OneDrive, which is a university approved storage system to protect your information. This information will then be transferred to a long-term storage system called The University of Sydney Research Data Store. We will write a report about the study and show it to other people but we won't say your name in the report and no one will know that you were in the study, unless you tell us that it's ok for us to say your name.

How long will the study take?



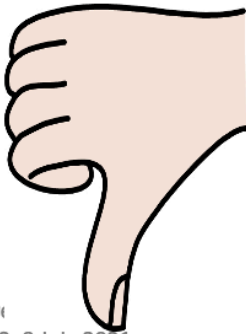
The study will take about 4 hours of your time, over the period of a few weeks. This includes the time that you spend in class when Vasiliki comes to visit your school and any interviews that you participate in. This also includes any time that you spend deciding whether you want to provide samples of your classwork to include in the study.

Are there any good things about being in the study?



You won't get anything for being in the study, but you will be helping us do our research.

Are there any bad things about being in the study?



This study will take up some of your time, but we don't think it will be bad for you or cost you anything.

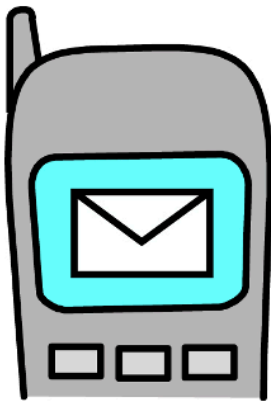
We want you to remember that when you critically reflect, you will be asked to think **why?** and **how?** about the things that you learn in class.

When sharing your opinions and ideas, you must remember to take turns when speaking, listen to others, and be respectful of other people's feelings when you talk about what you think or feel.

Will you tell me what you learnt in the study at the end?

Yes, we will if you want us to. There is a question on the next page that asks you if you want us to tell you what we learnt in the study. If you circle Yes, when we finish the study we will tell you what we learnt.

What if I am not happy with the study or the people doing the study?



If you are not happy with how we are doing the study or how we treat you, then you or the person who looks after you can:

- Call the university on +61 2 8627 8176 or
- Write an email to human.ethics@sydney.edu.au

This sheet is for you to keep.

The pictures we used in this sheet are from Microsoft Clip Art and from the people at Inspired Services Publishing (www.inspireservices.org.uk). They said it's ok for us to use them.

Letter to the Principal



THE UNIVERSITY OF
SYDNEY

Sydney School of Education and Social Work
Faculty of Arts and Social Sciences

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PROFESSOR MICHAEL ANDERSON

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Critical reflection; A poeticising venture: The experiences of four, Stage 4 teachers and their students as they embrace the possibilities of a critically reflective pedagogy

Dear [REDACTED]

This letter invites your school to take part in a PhD study about the phenomenon of critical reflection and how it can be fostered during teaching and learning in the Stage 4 classroom. The aim of this study is to collect data about how critical reflection can be taught to Stage 4 students using the 4Cs, which will valuably assist Australian high schools to understand, practise and embed this transformative capability more clearly into their pedagogy and professional practice.

Vasiliki Papaefstathiou is conducting this study as the basis for the degree of Doctor of Philosophy (Arts and Social Sciences) undertaken at The University of Sydney. This will take place under the supervision of Professor Michael Anderson and Dr Alison O'Grady.

If your school decides to partake in this study, one or more of your teachers will be invited to participate in the design and implementation of a short unit of work (spanning 3-4 weeks) that adopts a critically reflective pedagogy. They will also be encouraged to embrace the 4Cs ethos, and experiment with poetry as a creative tool to stimulate critically reflective learning in their classroom. Potential teacher recruits must be assigned a Stage 4 (year 7 or 8) teaching load in 2022 in order to partake in this research, which is when the teaching component of this study is projected to commence. The components of this study are detailed below:

At the start and conclusion of the study, teachers will participate in one audio-recorded, semi-structured interview with the researcher to determine their initial knowledge and experience using a critically reflective pedagogy to frame their teaching. Teachers will attend 2-3 planning sessions on Zoom to discuss and design their unit of work in consultation with the researcher and other Stage 4 teacher participants recruited into this study. Once teachers commence teaching on their units throughout Terms 1 or 2 of 2022, they will partake in at least 2 scheduled lesson observations, during which the researcher may choose to conduct impromptu interviews with students in their class, on the school site. Teachers will also be required to provide classwork samples that evidence the forms of critically reflective learning produced from the study, particularly classwork that uses poetic processes to facilitate critical reflection in their respective KLAs. Teachers will have the opportunity provide their written consent through a participant information statement and consent form, both of which are attached for your convenience with this letter.

Approval for this study has been granted by The University of Sydney's Ethics Committee (HREC) and the State Education Research Applications Process (SERAP). Attached with this letter is a participant consent form where you can decide whether your school will partake in this study, with the knowledge that your school and your teacher-participant/s are free to withdraw from the study at any time, for any reason. Both your identity and any information gathered during the study will remain strictly confidential, unless required by law. The results of the study will be made available to both you and the teacher-participant/s, in a one-page lay summary. Likewise, if you desire a copy of the final PhD thesis, this will also be made available to you via email. If you have any further questions about the study, Vasiliki Papaefstathiou will be available to discuss it with you and answer any questions at [REDACTED]

Kind regards,

Vasiliki Papaefstathiou
02.03.20

Participant Consent Form (General)



ABN 15 211 513 464

Sydney School of Education and Social
Work
Faculty of Arts and Social Sciences

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Critical reflection; A poeticising venture: The experiences of four, Stage 4 teachers and their students as they embrace the possibilities of a critically reflective pedagogy

PARTICIPANT CONSENT FORM

I, [PRINT NAME], agree to take part in this research study.

In giving my consent I state that:

- I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.
- I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
- The researchers have answered any questions that I had about the study and I am happy with the answers.
- I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to be in the study will not affect my relationship with the researchers or anyone else at the University of Sydney now or in the future.
- I understand that I can withdraw from the study at any time.
- I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.
- I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.
- I understand that the results of this study may be published, and that publications will not contain my name or any identifiable information about me.

Critical reflection; A poeticising venture
Version 1, 5 April 2021.

I consent to:

- **Audio-recorded interviews**

YES NO

- **Classroom observation**

YES NO

- **The collection of student work samples**

YES NO

I would like to review my interview transcripts

YES NO

I would like to receive feedback about the overall results of this study

YES NO

If you answered **YES**, please indicate your preferred form of feedback and address:

Postal: _____

Email: _____

.....
Signature

.....
PRINT name

.....
Date

Participant Consent Form (Easy English- Child)



THE UNIVERSITY OF
SYDNEY

**Sydney School of Education and Social
Work**
Faculty of Arts and Social Sciences

ABN 15 211 513 464

PROFESSOR MICHAEL ANDERSON
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Critical reflection; A poeticising venture: The experiences of four, Stage 4 teachers and their students as they embrace the possibilities of a critically reflective pedagogy

Consent Form

If you are happy to be in the study, please

- **write** your **name** in the space below
- **sign** your **name** at the bottom of the next page
- put the **date** at the bottom of the next page.

You should only say 'yes' to being in the study if you know what it is about and you want to be in it. If you don't want to be in the study, don't sign the form.

I,[PRINT NAME], am happy to be in this research study.

In saying yes to being in the study, I am saying that:

- I know what the study is about.
- I know what I will be asked to do.
- Someone has talked to me about the study.
- My questions have been answered.
- I know that I don't have to be in the study if I don't want to.
- I know that I can pull out of the study at any time if I don't want to do it anymore.

Critical reflection; A poeticising venture
Version 1, 6 April 2021.

- I know that I don't have to answer any questions that I don't want to answer.
- I know that the researchers won't tell anyone what I say when we talk to each other, unless I talk about being hurt by someone or hurting myself or someone else.
- I know that I have to agree to attend class when the researcher (Vasiliki) visits, if I also want to take part in an interview.

Now we are going to ask you if you are happy to do a few other things in the study. Please tick (✓) 'Yes' or 'No' to tell us what you would like.

Are you happy for us to **observe** your learning? **Yes** **No**

Are you happy for us to **collect** your classwork? **Yes** **No**

Are you happy for us to **interview** you during class? **Yes** **No**

Are you happy for us to **tape record** your voice? **Yes** **No**

Do you want us to tell you what we **learnt** in the study? **Yes** **No**

.....
Signature

.....
Date

Appendix C

Semi-structured Interview Schedule for Initial Teacher Interviews

Semi-structured interview schedule 1: Beginning the study

The following questions will be posed to each teacher-participant at the beginning of the study, before the initial planning of the unit of work has commenced. Teachers will be invited to explore what they already know about critical reflection and 4Cs pedagogy, whilst also considering how they might use poetry to plan and devise learning experiences that encourage critical reflection through multiple voices, perspectives and narratives.

+

Number:	Question
1	What do you know about critical reflection? What comes to mind when you think about this term?
2	How do you practise critical reflection as a teacher?
4	Do your students practise critical reflection during learning? <i>Follow up Q:</i> If so, in what ways does this occur in a typical lesson?
5	What about the critical reflection process excites and/or challenges you as a teacher?
6	<i>Critical reflection is one of the 4Cs, each with its own coherence maker. The critical reflection crucible is a coherence maker that helps us make sense of this capability.</i> Have you implemented the critical reflection crucible in practice before? <i>Follow up Q:</i> If so, could you provide an example of how this looked during teaching and/or learning in your classroom?
7	In what ways have you used poetry as a reflective tool during teaching or learning? <i>Follow up Q:</i> Do you believe that writing poetry can be used to facilitate critical reflection during learning?
8	In what ways could you use poetry to create learning experiences that encourage critical reflection in your classroom?
9	Do you believe that approaching curriculum content from different perspectives, narratives and/or voices can enrich learning for your students? If so, how?
10	In what ways could you use critical reflection to design learning materials that explore content through a multi-perspectivist lens?
11	What do you hope to learn by participating in this study?

Semi-structured Interview Schedule for Final Teacher Interviews

Semi-structured interview schedule 2: Concluding the study

The following questions will be posed to each teacher-participant at the conclusion of the study, as a way to review their experiences and progress. These questions are subject to change and will be modified throughout the study as new and more focused questions come to light.

Number:	Question
1	What were some of your most notable experiences as a teacher-participant in this research?
2	What did you find interesting or curious about the teaching and learning experiences that you encountered in your classroom?
3	What did you find challenging or unexpected about the teaching and learning experiences that you encountered in your classroom?
4	Do you believe that you successfully fostered a learning environment where critical reflection was cultivated in your classroom. Why? /Why not? <i>Follow up Q:</i> Could you provide some examples where you believe critically reflective learning occurred?
5	What were your experiences of using poetry to facilitate the critical reflection process in your classroom? <i>Follow up Q:</i> How did you and your students use poetry as a creative and reflective tool to critically reflect about curriculum content? Examples?
6	What did you notice about the poetry that your students created throughout this unit of work?
7	In what ways were students encouraged to view curriculum content through multiple perspectives, narratives or voices as part of their critically reflective learning experiences?
8	What did you find transformative about the critical reflection process throughout this study?
9	Could you provide an example of what this transformation looked like when students reached the re-solving stage of the crucible?
10	Is there anything else that you wish to contribute?

Lesson Observation Protocol

Observation Schedule:			
School:	Teacher:	Subject:	Stage: Year:
Research Focus:			
Subject/topic:	Performed by the teacher	Performed by the student	
Stage 1- Identifying assumptions			
Stage 2- Questioning- Why this? Why so?			
Stage 3- Contesting, elaborating and adapting			
Stage 4- Re-solving			

<p>Using a multi-perspectivist lens</p> <ul style="list-style-type: none">- Teaching the content through multiple perspectives, narratives or experiences.- Learning through different student perspectives, narratives or experiences		
<p>Using poetry to critically reflect</p>		

Moments of transformation - creating new ideas, understandings or insights - physical changes in the learning environment		
Additional insights		

Appendix D

Participant Interview Transcript Sample (From Dominique’s Initial Interview in the Study)

4Cs Research Project: Teacher Interview

Date: 12.05.22

Teacher: Dominique

Context: Initial interview conducted at the start of the study before participants had attended the planning session or begun teaching their units.

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Initial/Exploratory Comments: Descriptive: noting what is said <i>Linguistic:</i> noting language use <u>Conceptual:</u> noting at an interrogative/conceptual level	Original Transcript	Emergent Themes
	Researcher: Okay. So, we'll get started. So, my first question for you is what do you know about the term critical reflection and what comes to mind when you think about this word?	
<p>Dominique initially thought critical reflection was critical thinking – the task for her was initially differentiating between the two before she began the study.</p> <p>Critical reflection is about the process of thinking about the bias that students bring to a text, what they do and don't know, being open to different interpretations of a text.</p> <p>Focus on the verbs/nouns being used by Dominique: <i>thinking about bias, being aware, being open, taking risks,</i></p>	<p>Dominique: For me, probably the hard thing is trying... initially trying to differentiate between critical thinking and critical reflection. Cause I started to think about what I do in my classroom and I, what I initially thought was critical reflection, maybe on reflections, more critical thinking. So, critical reflection to me... it's about students thinking about the bias that they might bring to a text or, their own position before they start reading into a text, but being aware of what they know, what they don't know, maybe being open to different interpretations of a text, maybe students taking risks or being... being</p>	<p>Defining critical reflection</p> <p>Critically reflecting in English</p> <p>Being open to new perspectives</p>

<p><i>being ready to realise/not realise that you're wrong, having flexibility, having good empathy skills,</i></p>	<p>ready to, to realise, not realise that you're wrong, but having that flexibility there.</p>	
<p>Empathy skills are highlighted as part of the skills that Dominique thinks are needed to critically reflect</p> <p>Dominique reflects on the skills that students in her classes need to build to critically reflect</p> <p>Getting through so much content, classes are very skills based</p> <p>Dominique wants to build her understanding of critical reflection</p> <p>Prior to starting the study Dominique equates her idea of critical reflection as checking on students' prior knowledge before a unit starts. She calls this her 'narrow idea of the term'.</p>	<p>So...and maybe having good empathy skills. Yeah. So, I tried to think about classes that I currently teach that maybe there's skills that I work on. I guess the hard thing for me, we're only a term in, uh, I sort of sat and had a bit <u>of</u>, bit of a think about the classes I currently have. And we're, we're getting through so much content <u>at the moment</u>. A lot of the subjects I'm teaching are so skills based. So, I guess maybe being part of this project, what I hope to get out of it is, is building my understanding of critical reflection. Because yeah, <u>at the moment</u>, for me, it seems my narrow idea of the term is having that time before... before we start a topic to see where kids sit on a certain view, or you know, their prior background.</p>	<p>Empathy skills</p> <p>Building one's understanding of critical reflection</p> <p>Assumptions about critical reflection</p>
<p>Dominique has strong relationships with her students.</p> <p>Students are willing to <u>open up</u> and share with her</p> <p>She confesses that her skill set isn't academic- she doesn't think she is able to extend the skills of high achieving students.</p> <p>Confident with her ability to build strong relationships and support mixed ability students.</p> <p>Works with the welfare team- <u>well-versed in how to support diverse learners</u></p> <p><i>The meaning of academic- Dominique uses this term to mean students who excel or are high achieving learners.</i></p> <p>Those '<u>really bright students</u>'</p>	<p>I think one thing I guess that I'm pretty good at is that the kids <u>open up</u> to me a lot about a lot of things. So, I've sort of... my skill set at this school's probably not academic so much, which is something maybe Marcus... you've got Marcus being part of this project. He's very academic. He's able to really extend those students that are bright, like in those top classes, those <u>really bright</u> students. For me, I've got more mixed ability classes. I work with the welfare team. I've always had bottom classes I guess, or mixed ability classes. So- I don't know. I guess my narrow view of the topic is if, if I'm to be honest, that <u>pretty cool</u> reflection maybe happens better or more often in top classes.</p>	<p>Building strong relationships with students</p> <p>Assumptions about critical reflection</p>

<p>Her assumption is that critical reflection happens 'better or more often' in the top or more high achieving (academic) classes. <u>This assumption is limiting because it prevents the opportunity to see a pathway in for the lower and mixed ability classes who could benefit from practising critical reflection.</u></p> <p>For Dominique- track her progression and how this assumption has changed. By the end of the <u>study</u> she was able to revise this assumption, especially with talks with Violet and myself about the possibilities here.</p>		
<p>This poses the question- how can critical reflection be taught to diverse learners- particularly those with learning difficulties, behavioural challenges or who find it difficult to engage in learning?</p>	<p>If that's to be honest. So maybe from this being part of this, I'd like to see how I can utilise the skills or the opportunities with some of those other kids that maybe have more behaviour problems or lack of focus in class.</p>	
	<p>Researcher: That's a <u>really interesting</u> assumption that you have coming into this. Um, I guess because you know, you haven't taught, you know, like extension classes or, those high capability students. Do you feel like you can change <u>that</u> and I guess try and use the strategies that we go through and build on your experience teaching this unit? I'm assuming this unit that you're going to be teaching is targeted to a mixed ability class. Is that right?</p>	
<p>Dominique is taking a year 8 enrichment class into this study but is also teaching a mixed ability year 8 concurrently.</p> <p>The aim for her mixed ability class is to build personal connection with texts- also something that is highlighted in the Stage 4 English K-10 syllabus</p>	<p>Dominique: This unit, this year eight unit that we're <u>gonna</u> all work on. I've <u>actually got</u> two year eight classes. So, it'd be quite interesting to see. I <u>have to</u> teach the same unit to both classes. The class that I have full time is not the one we are going, that you are looking at, but you are all welcome to come into the class. It's mixed ability. There's a lot of needs in the class. There's a lot of behaviour issues in the class. Yep. Sometimes those pockets where students can reflect and</p>	<p>Critically reflecting with different ability groups</p>

<p>Dominique is teaching a top year 8 class as part of this study- this is somewhat unfamiliar territory for her as she feels less confident teaching more academic English learners.</p>	<p>be honest about things and make personal connection... connections with texts don't really happen as much. So, it'll be <u>really interesting</u>. I might try some of these same strategies with that mixed ability class. See what the I can possibly make those comparisons. The other class that we're going to work with is the top class. So having said that, I only usually have mixed ability classes. This class that, that you are focusing on is the top year eight class.</p>	
<p>She has taught the year 8 students before and knows the students in this class- this is a strength Highlighting the <u>experience</u> she has through her relational teaching Worked with this group during covid lockdown in 2021 Dominique sees them 2x a fortnight and Jeremy shares the class with her Dominique knows which students 'would be great at this'. She knows her students very well and already pinpoints the good reflectors in this group. Respect in this classroom- Dominique highlights this Students have shown her that they have great critical thinking skills</p>	<p>I had them last year for English. So out of all the participants in this project, I probably know the kids the best. And I had them last year, so I can draw on a bit of experience when I had them. I mean, we were in lockdown [the NSW lockdown in response to COVID-19] last year for the whole term, but there <u>was</u> some really great things I got out of teaching that group. And then this year I've only got them twice a fortnight. So, Jeremy who's um, the other participant, I share that class with him. <u>So</u> it's... I can <u>definitely point out</u>... I can <u>definitely let you know</u>, some kids in that class that I think already would be great, will be great at this. Who've shown me that they're great at reflecting. Their critical thinking skills are <u>great</u> and they have those opportunities because there's a lot more respect in that classroom. I just like to see how, I guess, in a way, how it evolves in my other class as well.</p>	<p>Knowing your students</p>
	<p>Researcher: It'd be very interesting to make that comparison and see, you know, because you've got two different groups of learners</p>	
	<p>Dominique: completely different.</p>	
	<p>Researcher: Yeah. So, I'm very interested to see how that pans out. And I guess at the end make...</p>	
	<p>Dominique: Some comparisons... I can say I did the exact same activity, same teachers, same activity. These are the different results</p>	

Appendix E

Table of Superordinate Themes from Dominique's Initial Interview

Table of Superordinate Themes from Dominique's Initial Interview in the Study		
Superordinate and Subordinate Themes	Page/line	Quote
Building one's understanding of critical reflection	1.22-23	what I hope to get out of it is, is building my understanding of critical reflection
Defining critical reflection	1.10-11	initially trying to differentiate between critical thinking and critical reflection
Implicit teaching of critical reflection	6.197	I think there was a lot of critical reflection initially
Fear of not being 'academic' enough	9.309-310	I guess what makes me nervous sometimes is that I'm not as academic as some of the other teachers
Fear of missed learning opportunities	9.311-312	I kind of need to have a, a direction to go in, or I might miss those opportunities
Assumptions about critical reflection	1.32-33	pretty cool reflection maybe happens better or more often in top classes
Critically reflecting in English	1.13-14	it's about students thinking about the bias that they might bring to a text
Textual choices offer diverse perspectives	6.185	it was an ad, a Lego ad that's called 'Everything's not awesome'
Textual choices showcase diverse experiences	6.195-196	it's about a little boy growing up in Afghanistan that then his family migrate to America
Textual choices prompt curiosity and interest	6.212	the kids were really immersed in it. They were very curious
Textual choices influence critical reflection	6.213-214	then they were going back looking at things in the media or talking about which media sources were reliable
Textual choices invite critical reflection		in terms of contesting the text, <u>definitely the ending</u>
Contesting assumptions about texts	8.267	we could've used that as an opportunity to... to stop and get sort of...
Opportunities to deepen reflection about English texts	8.278	I find sometimes with units that we teach in <u>English</u> , we just have to rush through
Challenges when critically reflecting in English	8.283-284	there'll be some avenues there to talk to them about Indigenous culture, but also different experiences...
Exposing students to new experiences through texts	14.506-507	Yeah, controversial in a sense
Textual choices can seem controversial to students	15.525	These units to do with Australian poetry. It's great that there's a bit of variety there
Favouring a variety of textual forms and experiences	15.526	texts, from a different gender point of view or from a different...from a different cultural point of view...
Exploring gendered and cultural perspectives through texts	16.556-557	they struggle with is when we go, okay, here's a text, we are looking at our topic, go off and find your own texts.
Developing independent consumers of texts	16.561-562	

Perspectives Being open to new perspectives Challenging initial perceptions	1.15-16 7.242-243	maybe being open to different interpretations of a text Right at the end of the unit, as I said before, has your perception changed?
Exercising empathy Empathy skills Strong emotional intelligence Poetry <u>as a way to empathise with new situations</u> Questioning to build empathy	7.240 1.18 9.305 14.482-483 14.487488	that empathy through the charact... the boy's situation and maybe having good empathy skills And I know that I've got <u>pretty strong</u> emotional intelligence I think it's a way to, to empathise with the situation they haven't been in before I guess talking to students about, if you were this person, how would you feel?
Critically reflecting with different ability groups Reflection on teaching approaches Small group work to encourage engagement Approaches to demonstrating their reflection Less risk-taking in learning Encouraging risk-taking Traits of 'good critical reflectors'	2.45/ 2.51 3.84 4.136-137 10.350-351 3.88 10.356-357 10.343	it's mixed ability. There's a lot of needs in the class / The other class that we're going to work with is the top class thinking aloud gives them that model... I've sort of led a few small group activities with teachers... writing down their critical reflection... <u>definitely speaking it</u> They don't take <u>risks</u> , they can be quite nervous about sharing their ideas with others <u>There's</u> a few students in that class who are willing to take risks. Who think aloud I see how they kind of, if to use a 4Cs term, <u>meccano</u> [build ideas] off each other
Building rapport Building strong relationships with students Knowing your students Building a safe learning environment Building confidence in learners Learners have limited experiences	1.26-27 2.57-58 4.133 4.131 10.344-345 16.553-554 / 15.540	I'm pretty good at is that the kids <u>open up</u> to me a lot about a lot of things I can <u>definitely let you know</u> , some kids in that class that I think already would be great, will be great at this being aware of the dynamics in the classroom and not to put kids on spot trying to make sure that it's an environment where those students feel comfortable The kids in the class that are deep thinkers are <u>really shy</u> and don't feel confident to speak up they have limited experiences with going overseas / about their limited experiences

<p>Re-thinking approaches to questioning in a unit Questioning strategies for deep reflection</p> <p>Critical questioning Critical questioning to unpack POVs Questioning to critically reflect</p>	<p>3.79 3.76-77</p> <p>6.182-183 6.188-189 7.219</p>	<p>I might go deeper into the questioning my questioning techniques in the classroom and <u>whether or not</u> I'm diving deep enough into a unit</p> <p>How do you contribute to being a global citizen? what do you understand about environmental issues? How have your assumptions changed?</p>
<p>Guided approach to teaching and learning</p> <p>Students need guidance Co-constructing new knowledge</p>	<p>3.100-101</p> <p>3.87-88 4.113-114</p>	<p>I guess I take that approach when I go into the classroom, in the sense that I give the kids that time</p> <p>The students at this school do need a lot of direction the fact that I'm thinking aloud, I'm trying to work through it at the same time</p>
<p>Building cultural knowledge through critical reflection</p> <p>Learners are very monocultural Exposing students to different narratives of Australian identity</p>	<p>6.197-198</p> <p>14.509 14.508-509</p>	<p>I think there was a lot of critical reflection initially on their understanding of Afghanistan</p> <p>Cause we're really, this school's very monocultural what does it mean to be an Australian and how that can mean different things to different people?</p>
<p>Prioritising engagement? Student interest and engagement Different approaches for engagement</p>	<p>15.519 7.223 4.134-135</p>	<p>It's hard as a teacher sometimes to go, okay, my primary aim is engagement the fact that things are happening in real world time, really interested them Some of those kids work better in group work anyway</p>
<p>Strategies for encouraging communication</p>	<p>10.357-358</p>	<p>So, if they start off the conversation, then it gives those other students a little bit of opportunity</p>
<p>Explicit teaching Needing to reference the coherence makers Implicit rather than direct teaching of critical reflection</p>	<p>11.398-399</p> <p>12.407</p>	<p>I had copies of those of the crucible and the cascade [the creativity cascade coherence maker] in my classroom, up on the wall So, I haven't consciously used them this year.</p>

Poetry as a reflective tool	13.467	in terms of the way that we think... or the way that we learn
Approaching conceptually challenging texts through poetry	13.473-474	“ <u>poems</u> are like a puzzle and the fun is trying to break it apart.”
Building new ideas through poetry	14.486-487	building those new ideas about things. It may just be something as simple as a summer's day or falling in love for the first time
Challenging assumptions through poetry	14.498-499	reflect there on what they knew about Indigenous languages and the way that they can be used and modernised and brought back to life
Songs as a form of poetry	14.503-504	the way that poetry or songs can introduce us to cultures that we don't know a lot about
Use poetry to critically reflect about Australian identity	15.544-545	What perspectives are not mentioned, not taken into consideration?
poetry through social media encourages new voices to be heard	16.571-572	Social media opens those avenues there where we can see different voices

Table of Superordinate Themes from Dominique's Final Interview

Table of Superordinate Themes from Dominique's Final Interview in the Study

Superordinate and Subordinate Themes	Page/line	Quote
<p>Working with the 4Cs approach Engaging with 4Cs capabilities more effectively 'Doing' collaboration and communication as a class The impact of the class dynamic</p> <p>Usefulness in the level of collaboration built-into 4Cs processes Evidence of increased confidence and quality of student work</p> <p>Building competence with a 4Cs process as a class enhances students' learning experience</p> <p>Confidence is achieved through repetition of a 4Cs process</p>	<p>7.218 7.225-26 7.240-41</p> <p>8.259 8.269</p> <p>14.467-68</p> <p>14.476-77</p>	<p>which was 'me, you' and then '21', and they did it so much better We got to number four or five when you were there, which says a lot about the kids what an interesting reflection that there just seems to be with this class, this real divide of the boys versus the girls I think that that level of collaboration will make a massive difference it was articulate and detailed and feeling confident to do that <u>definitely shows agency</u> after a few months of working through it, that idea that it's that shortcut, that the kids know exactly what is expected having done it <u>over and over again</u>, it's polished to the point where the students can really reflect deeply</p>
<p>Poetry and creativity Experimenting with poetry Students working creatively using blackout poetry Don't pass on opportunities to be creative</p>	<p>2.63-64 4.121-122 13.456-57</p>	<p><u>So</u> Marcus was happy to experiment with that with our class there was a lot of meaning there in the words that she'd chosen I pass up opportunities sometimes to play with my classes and be creative because I'm worried about time</p>
<p>The road to critical reflection Reflecting on teaching practice Reflection in action during learning activities</p> <p>More time spent on reflection</p> <p>Is it <u>really critical</u> reflection? Critical reflection is still being developed</p>	<p>3.83-84 6.199-200</p> <p>9.286-97</p> <p>5.158 8.250</p>	<p>I tend to give the students too much right at the beginning. <u>So</u> I help them too much a <u>really good</u> lesson at them reflecting on... their assumptions on what they bring to texts the blackout poetry and the 'Man from Snowy River', I would've liked each of those to run for three lessons I think the ability to work in groups sort of really helped too I do feel there's still a way to go with that class</p>
<p>How do you build a culture of sharing and confidence in a school? Student-teacher relationships are important</p> <p>Relational work helps teachers to challenge and engage students in their learning</p>	<p>9.308 10-336-38 10.344</p>	<p>a lot of the kids at this school will say, "don't read out my answer. I'll write it I know which kids have... which kids in that class have more confidence or have a bit of power over the other kids in the room I've got a <u>really good rapport</u> with them and a good relationship with them</p>

<p>How learning expectations and texts shape engagement</p> <p>Expectations and motivation</p> <p>A passion for English?</p> <p>Not showing positive or respectful attitudes</p> <p>Textual choices influence the conversations and perspectives explored</p> <p>Working together to unpack more challenging English texts</p>	<p>7.248-8.250</p> <p>7.243-44</p> <p>7.244-45</p> <p>7.246</p> <p>6.178-79</p> <p>7.246-48</p>	<p>it's quite personal when you're reflecting on, on your understanding of a text, you know, what you've learned from a text or... or that sort of thing.</p> <p><u>Usually</u> the kids are quite competitive to get into the top class and quite supportive of each other</p> <p>it's an unusual class. It's an interesting class</p> <p>they have poor listening skills, they speak over one another</p> <p>we'll pull them <u>outta</u> their comfort zone. So, we're doing 'Animal Farm'</p> <p>I think <u>in order for</u> them to feel confident, to critically reflect, they need to feel as if people will listen, listen to, and not critique their own personal views.</p>
<p>Doing things differently</p> <p>Taking risks to promote student resilience and independent learning</p> <p>Taking risks and finding their voice</p> <p>Challenging assumptions about students' capabilities</p> <p>Improvement in student confidence</p> <p>Importance of taking risks</p>	<p>4.108-09</p> <p>3.87-88</p> <p>4.130-31</p> <p>4.132-33</p> <p>8.256</p> <p>13.448-49</p>	<p>I probably would've given them too many examples, whereas he didn't give them any examples at all</p> <p>He's a lot more patient than me and being able to sit back and allow those students to work through those problems</p> <p>they had to try and come up with their own concept statements</p> <p>I didn't think they were capable of in year eight</p> <p>Definitely</p> <p>I think it's a... the lesson that I've learned through all the 4Cs activities (and through, whenever I watch Marcus' classes in particular), is to take risks</p>
<p>Challenging learners by taking them out of their comfort zones</p> <p>Embracing the chaos created by the learning pit</p> <p>Encountering the learning pit</p> <p>Encountering challenging learning</p> <p>Digging deeper through collaborative discussion and reflection</p> <p>Challenging students to explore other perspectives within a text</p>	<p>7.221-23</p> <p>3.94-95</p> <p>3.101-03</p> <p>4.110-11</p> <p>6.196-98</p> <p>6.200, 6.202-03</p>	<p>I was just trying to get them <u>outta</u> their comfort zone because the boys would pick boys, girls pick girls</p> <p>And by the end of it, what I think Marcus was most proud of is the fact that they were able to sort of, he was saying like, 'dig themselves out of it' and then he said, "I want you to change the poem in some way."</p> <p>At first, they were sort of trying to work out whether they <u>wanna</u> do shapes or whether they wanted to focus on words, or they kind of struggled at first</p> <p>I said, "well, what does freedom mean?" And they said that was about choice and opportunity. So, it was <u>really good</u> to dig into.</p> <p>And then, and then digging in deeper / And some of those kids that are <u>really quiet</u> in class were quite vocal</p>

Appendix F

Master Table A: Phase One of the Study

Master Table A: Participants' Initial Interviews (Phase 1)

Superordinate Themes	Jeremy		Dominique		Violet	
	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.
1. The process of critical reflection	move the puzzle piece around for themselves	9.298-299	I think there was a lot of critical reflection initially	6.197	reflection in thought and in action is kind of my understanding of... my gut response to critical reflection	1.21-22
	have the empathy to listen to different voices	9.298	initially trying to differentiate between critical thinking and critical reflection	1.10-11	like there's some kind of element of wisdom or discernment in critical reflection, as well as the challenge and thought	1.19-21
2. Critically reflective teaching and learning using the 4Cs approach	giving the students voice...free choice of poems	9.281	it's about students thinking about the bias that they might bring to a text	1.13-14	what do you notice about the coherence maker? Like, what do you notice about it? How could it be relevant? How could it help us solve the water crisis?"	7.234-36
	and using...those compositions <u>as a way to do some critical reflection</u>	9.284	the kids were really immersed in it. They were very curious	6.212	I've noticed like the, the coherence makers can be a bit overwhelming... when presented to students with nothing before	9.301-2
3. A multi-perspectivist approach to teaching	show students that there are a range of perspectives and voices and narratives out there	9.294-295	maybe being open to different interpretations of a text	1.15-16	for example, the asylum seeker documentary gave my students an opportunity not to say they're dumb and stupid, but to listen and to ask why?	11.370-71

critical reflection						
	take information from a range of places	9.297-298	Right at the end of the unit, as I said before, has your perception changed?	7.242-243	I think it creates depth. Depth of character, you know, <u>actually listening</u> to listening to people you disagree with and like embracing challenge	11.386-88
4. Curating questions that promote critical reflection	What do you think? What do you like?	3.92	I might go deeper into the questioning	3.79	it's beginning with why? questions or it's like other, like once they've noticed an assumption or they've become alert to something in their world	2.62-64
	being a bit skeptical of things	4.102	How have your assumptions changed?	7.219	I think often it's like curating questions in class and like having question generating as a way of students thinking	2.57-58
5. A guided approach to challenging assumptions through critical reflection			I guess I take that approach when I go into the classroom, in the sense that I give the kids that time	3.100-101	I think then to say, "what are our assumptions about the people in the video?" You know, flipping it again, just kind of keep re-shifting the frame of reference	9.294-96
			the fact that I'm thinking aloud, I'm trying to work through it at the same time	4.113-114	model a few assumptions so that they could get a taste or a <u>flavour</u> of it	8.245-46

6. Poetry as a tool for critical reflection			in terms of the way that we think... or the way that we learn	13.467	I've seen students feel quite safe in that process because its words written by someone else, but it's curated by them	10.355-56
			building those new ideas about things. It may just be something as simple as a summer's day or falling in love for the first time	14.486-487	blackout poetry has been a great way to convey understanding and to the students to create and make their own meaning from	10.358-60

Master Table B: Phase Two of the Study

Master Table B: Observation Notes and Classroom Interviews (Phase 2)

Superordinate Themes	Year 8 Geography (Violet’s class)		Year 8 English (Jeremy, Dominique, and Marcus’ class)	
	Quotes from interview transcripts or observation notes	Page line/no.	Quotes from interview transcripts or observation notes	Page line/no.
Moving from critical thinking to critical reflection	“Does technology connect us or separate us?” (spoken by the teacher)	3	The lesson where students crafted collaborative PEEL paragraphs helped develop their conceptual skills, to prime them for critical reflection.	8
	“Is it possible for people and places to coexist?” (spoken by the teacher)	6		
	“If people weren’t here the world would be overgrown and in disaster” (student response)	6		
Guiding learners towards critical reflection	The teacher unpacks the image (image + caption regarding pollution) to guide the class discussion to lead into a bigger conceptual focus using the Q: “Is it possible for people and places to co-exist?”	6	Conversations about connotative and denotative meanings with students in this class led to student’s discussing the line about acid seas in the poem.	
			Read-aloud of the poem, The Man from Snowy River to the class. Marcus did a think-aloud of key ideas from the poem with the class to aid conceptual thinking.	
Teaching using multimodal provocations	Image presented on screen with the caption “um, where are we again?” The image is depicting people in the sea surrounded by plastic and rubbish, a cruise ship floats nearby. Music is added (soft and slow to start and then reaches a crescendo)	6	The read-aloud of the poem, The Man from Snowy River acted as a provocation for conceptual thinking about gender, bravery and courage.	

	The Leunig poem/cartoon	1		
‘Holding the process’: Practising 4Cs processes to foster critical reflection	“ <u>challenge</u> yourself to keep going for another 30 seconds.”	6	Collaborative processes used to begin the lesson – e.g., the game ‘21’	8
	Playing ‘verbal tennis’ to sustain a long rally of ideas in pairs	10	Dominique noticed that game ‘21’ was stalling, so she asked the group if they could come up with a strategy to help get the class to 21 faster. This was trialled and it worked.	
	“ <u>hold</u> the process” (students have to que each other in and be patient when participating in the ‘speaking into the void’ process)	6	Jeremy trialled the process of ‘speaking into the void’ with this class for the first time with mixed results.	13
The crucible as a teaching and learning tool	“ <u>the</u> heat equals questions or the heat equals new perspectives or the heat equals the people up in this room talking.”	1.14-15		
	The teacher put an image of the orange crucible coherence maker on the electronic whiteboard and asked students to link their learning to each of its four stages.	11		
	“ <u>on</u> the top, these are the flames where... when I have the, um, ideas and all that link off.”	2.28-29		
	Draw a crucible activity- the assumption driving the activity is “tourism harms more places than it helps, tourism kills tourism.”	7		

Creativity and critical reflection	“I made the handle like this because it has a little curve here” ...it’s easier to handle.” Students draw and personalise their own crucibles for an activity. “Draw a crucible and throw something into it.”	1.18; 1.20	Students created blackout poems that showed their creativity	
	Students’ spectra look different (some have ticks and crosses to mark each end, colour is used, some have put red marker on one end and green on the other to symbolise POS/NEG.	11	The group analysis and PEEL paragraphs offered a creative response and interpretation of the poem that was unique to each group.	13
Exploring diverse perspectives	“ <u>and</u> like that <u>child like</u> , feels like lonely”	1.16	“ <u>connotation</u> - acid seas rising.” (acid has a negative connotation and gets students thinking about perspective)	4
	“ <u>can</u> you hear the passion? Can you hear the anger?” (in response to the Instagram post responding to Leunig’s cartoon/poem)	3	Students explored their perspectives about the PEEL paragraph writing process as a class. Speaking into the void <u>opened up</u> a space to reflect on their experience.	13

Master Table C: Phase Three of the Study

Master Table C: Participants' Final Interviews (Phase 3)

Superordinate Themes	Jeremy		Marcus		Dominique		Violet	
	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.	Quotes from transcript	Page line/no.
Teaching and learning within the 4Cs approach Experiences with the 4Cs approach Working with the 4Cs approach Student engagement and receptiveness towards the 4Cs approach The possibility of building 4Cs capabilities with younger cohorts	trying processes that I hadn't necessarily tried before	2.35	it's the importance of building those connections and that confidence in the kids	9.309-10	it was articulate and detailed and feeling confident to do that <u>definitely shows</u> agency	8.269	that surprised me a bit because we do a lot of that in regular classes	1.18-19
	I think it was good for me to maybe try and attempt some new things	2.32	I think that's the power of trying to do it in year seven and eight and get those relationships and collaborations working in those earlier years	9.296-97	having done it <u>over and over again</u> , it's polished to the point where the students can really reflect deeply	14.476-77	enjoyable and positive receptiveness to the word 4Cs	1.16
The impact of collaboration on the meaning-making process Collaboration and the meaning-making process Good sense of teamwork and group dynamic Being a confident collaborator	they were able to make a connection with Indigenous Australia	10.308	build their skills in collaboration...And it really takes time to do that	2.61-63			I think they have a, a sense of a team and a group that is <u>really lovely</u>	3.71
			they were quiet...they weren't very cohesive in that eight five class	8.270-271			that's built by process when it's like process that makes it, um, uh, more seamless to collaborate	3.75-76
Experimenting with poetry as a creative tool for critical reflection Using poetry to critically reflect Poetry and creativity	I'm not sure that the students particularly used poetry for critical reflection	2.41	they love that, that put them in a much more creative flow	12.399	there was a lot of meaning there in the words that she'd chosen	4.121-122	I think for some of my kids who really struggled, chose an acrostic poem	5.160-61

Experimenting with poetry and poetic form Poetry as a tool for critical reflection	I did find it a bit challenging to try and really pinpoint exactly what I was seeking to do	2.39	that was something they enjoyed doing... it helped them understand about that idea about careful selection of language	12.400-01	I pass up opportunities sometimes to play with my classes and be creative because I'm worried about time	13.456-57	it was kind of challenging their assumptions about poetry	7.220-21
The road to critical reflection Developing critical reflection skills Teaching holistically through the lens of critical reflection Teaching critical reflection	And an example is students actively seeking out some feedback and sitting down, just when they're working in their small groups and me being able to ask them some questions	5.142-44	the cognitive demands of particularly the critical reflection crucible for students	7.227-28	I tend to give the students too much right at the beginning. <u>So</u> I help them too much	3.83-84	for me being a bit more deliberate and intentional in using the crucible in my lessons	1.21-22
Engaging with the crucible in its shape and with its process The complexities associated with teaching critical reflection	I would say that the students actively seeking out feedback demonstrated that they had critically reflected.	5.154-55	the noticing came back that they didn't necessarily have these skills	11.374-75	a <u>really good</u> lesson at them reflecting on... their assumptions on what they bring to texts	6.199-200	it kind of felt like more of like a reckoning with it rather than just an exposure moment for kids	1.26-27
Shaping curriculum content through multiple perspectives, narratives and voices Exploring diverse perspectives through text selection in English	looking at those texts, in conjunction with each other, the students were seeing some different perspectives	8.251-52	more listening to each other and having their voices heard	16.556			I was quite deliberate in creating opportunities for students to notice assumptions	4.117-18
Exposing students to perspectives and challenging learning	and where they were coming from and whose voice they were representing	8.267-69	And why there are just men / why has it been, you know, conveyed this way?	7.256-57, 11.374			acknowledge these, that different perspectives exist	8.282

Letting your stimulus be powerful: Using provocations Provocations for critically reflective learning	We just kind of looked at a key quote / we watched the, um, film clip	9.276-77, 278					The Instagram post was provocative...a bit of kick in the lesson	7.237-38
	I just kind of asked them to what they, if they recognised any words or if they, if they knew anything	9.291-92					okay, listen up, we're on our toes here. Who's saying this?	7.239-40
Entering the learning pit: deep learning Challenging learners by taking them out of their comfort zones Digging deep into the content Entering the learning pit Accessing higher order thinking in Stage 4			allowing that moment of disorientation for the kids //challenging them to be uncomfortable / that was right out of their comfort zone	1.17-18/5.166	And then, and then digging in deeper / And some of those kids that are <u>really quiet</u> in class were quite vocal	6.200, 6.202-03	a deeper interrogation of something that's a part of a, a whole, a bigger picture	9.309-10
			that trust in the classroom and all those things work more effectively	8.277	And by the end of it, what I think Marcus was most proud of is the fact that they were able to sort of, he was saying like, 'dig themselves out of it'	3.94-95	Trying to see how we could start to unravel perspective as a concept	8.272-73