THE ENGAGEMENT OF METACOGNITION DURING CRITICAL LITERACY DISCOURSE BY YOUNG TALENTED READERS

A thesis submitted for the degree of

Doctor of Philosophy of

The University of New England

Michelle Lea Bannister-Tyrrell

Master of Education: Charles Sturt University
Bachelor of Education: Charles Sturt University
Diploma of Teaching: Mitchell College of Advanced Education

November 2012

ACKNOWLEDGEMENTS

"You ought to return thanks in a neat speech," the Red Queen said, frowning at Alice as she spoke.

Lewis Carroll, *Through the Looking-Glass*

This thesis is dedicated to my husband Anthony, who saw in me what I could not see in myself, and endured the entire process with endless love, support and good humour.

Also my heartfelt gratitude and thanks to:

- My sons David and James for their love, faith and inspiration. A special thank you also to James for his assistance and expertise with the filming process, setting up and maintaining camera equipment, assisting with participants during the filming sessions, and downloading and formatting films in readiness for the transcription process.
- Dr. Susen Smith and Professor Peter Merrotsy for their invaluable expertise, endless enthusiasm and encouragement throughout this long journey. Also, Associate Professor Linley Cornish's essential energy in the final stages.
- Cathy Oliver for her tireless assistance in the co-coding process, and critical friends Dr. Jae Major and Trisha Poole for their curiosity and questions.
- Colleagues and friends Elizabeth Flett and Nigel Cockington, who unreservedly offered their time, and practical support for the enablement of this study. Also, to the students and staff who made this study possible.
- My loving quoins: Dad and Mum, Audrey and Sid, Christine and Jill, for their foundations of permanence and strength.

ABSTRACT

While little empirical research has focused on talented readers, so too is little known about the relationship between metacognition and critical literacy. This mixed method qualitative study addresses both of these gaps in the research literature.

One premise inspiring this study has been the declining performance of Australia's top-end reading scores in international assessments over the past decade. A recent media release by the Australian Council for Educational Research (ACER) highlighted this disturbing trend from the Program for International Student Assessment (PISA) conducted every three years by the Organisation for Economic Cooperation and Development (OECD) with the finding that 'Australia's overall performance declined by 13 score points from 2000 to 2009. The decline (in reading) is primarily among higher achieving students' (Masters, 2010, online).

In 2004 a review of the literature on talented readers by Reis et al. found much of it to be primarily anecdotal in nature with little research showing how to challenge and meet the learning needs of this group. With a better understanding needed of the self-systems that enable advanced reading skills clearly needed, this study used observations to explore the metacognitive processes adopted by young talented readers during critical literacy activities as compared with their typical peers.

This study had a dual focus. First, to find out if critical literacy requires the employment of metacognitive strategies for successful analysis, understanding and critiquing of texts; and second, to discover if young talented readers are more adept at employing metacognition than their same-age peers, when interacting with critical literacy discourse.

Eleven case studies across the three curriculum stages of Australian primary schools, presented close discourse analysis of the responses of talented and typical readers from seven to twelve years of age. Through the development and employment of a discourse analysis framework tool, data revealed inextricable connections between critical literacy and metacognition.

This study also uncovered a number of ways in which talented and typical readers differ in their ability to transfer reading skills and strategies across different contexts, as well as differences in monitoring, planning and controlling of their responses and problem solving abilities. The findings of this study support the growing evidence that metacognition and self-regulation are not late developing skills as previously believed. By comparing popular self-survey tools designed to measure metacognition with an observational tool, the effectiveness of these instruments was evaluated with a focus on appropriateness with young children.

Finally, the findings of this research redress previously held beliefs that talented readers should not be considered gifted students and validates the inclusion of these students in gifted pedagogy. Based on the data collected by this study, a framework for clearer identification practices and the development of appropriately challenging learning design was developed based on the data collected by this study.

Reading furnishes the mind only with materials of knowledge;

it is thinking that makes what we read ours.

John Locke

Table of Contents

PRELIMINARY ..... **II**
CERTIFICATION II
ACKNOWLEDGEMENTS ..... **III**
ABSTRACT ..... **IV**
LIST OF TABLES X
LIST OF FIGURES XIII
LIST OF ABBREVIATIONS AND ACRONYMS XVI
GLOSSARY XVII
CHAPTER ONE: INTRODUCTION **1**
1.1 BACKGROUND 1
1.2 SIGNIFICANCE OF THE STUDY 6
1.3 PURPOSE OF THE STUDY 9
1.4 RESEARCH DESIGN 9
1.5 STRUCTURE OF THE THESIS 10
CHAPTER TWO: LITERATURE REVIEW **12**
2.1 INTRODUCTION 12
2.2 TALENTED READERS 13
2.2.1 INTRODUCTION 13
2.2.2 HOW IS THE TALENTED READER DEFINED? 13
2.2.3 GIFTED MODELS FOR TALENTED READERS 17
2.2.4 CURRENT ISSUES FOR TALENTED READERS 21
2.2.5 CONCLUSION 28
2.3 READING 29
2.3.1 INTRODUCTION 29
2.3.2 THE READING PROCESS 29
2.3.3 THE NEUROSCIENCE OF READING 30
2.3.4 THE READING PROCESS: AN AUSTRALIAN PERSPECTIVE 31
2.3.5 READING AND INTELLIGENCE 35
2.3.6 CONCLUSION 35
2.4 CRITICAL LITERACY 36
2.4.1 INTRODUCTION 36
2.4.2 DEFINITION 36
2.4.3 EVOLUTION OF CRITICAL LITERACY 38
2.4.4 UNIQUELY AUSTRALIAN 43
2.4.4 AUSTRALIA: THE BATTLEFIELD OF CRITICAL LITERACY 48
2.4.5 GUIDING PRINCIPLES AND ELEMENTS OF CRITICAL LITERACY 51
2.4.6 CONCLUSION 56
2.5 METACOGNITION 57
2.5.1 INTRODUCTION 57
2.5.2 METACOGNITION AND GIFTEDNESS 57
2.5.3 EVOLUTION 59
2.5.4 ATTEMPTS TO DEFINE METACOGNITION 62
2.5.5 INCONSISTENCY IN THE FIELD 65
2.5.6 A TAXONOMY AND CONCEPTUAL FRAMEWORK OF METACOGNITION 67
2.5.7 MODERATORS OF METACOGNITION 76
2.5.8 METACOGNITION, SELF-REGULATION AND COMPREHENSION 85
2.5.9 MEASURING METACOGNITION 90
2.6 CONCLUSION 98

CHAPTER THREE: RESEARCH METHOD 99
3.1 Introduction 99
3.2 Design 99
3.2.1 Instrument Design 101
3.2.2 Metacognitive Behaviours Observational Tool 101
3.2.3 Taxonomy of Metacognition 102
3.2.4 Think Aloud Protocols 103
3.2.5 Critical Literacy Questions 103
3.3 Pilot Study 104
3.3.1 Site and Sample 104
3.3.2 Instrumentation and Data Collection Process 105
3.3.3 Data Collection Procedure 105
3.3.4 Design of Critical Literacy Questions 107
3.3.5 Evaluation of Data Collection Procedure 107
3.4 Primary Study 107
3.4.1 Sites 108
3.4.2 Participants 109
3.4.3 Identification of Talented Readers 109
3.4.4 Standardised Reading Test Results 109
3.4.5 Instrumentation and Data Collection 118
3.4.6 Procedure 103
3.5 Data Analysis 123
3.5.1 Analysis of Critical Literacy Answers 123
3.5.2 Scoring Critical Literacy Answers 124
3.5.3 Analysing Metacognitive Behaviours 125
3.5.4 Scoring Metacognitive Behaviours 130
3.6 Limitations Within the Data Analysis Procedures 131
3.7 Conclusion 132

CHAPTER FOUR: DISCOURSE ANALYSIS 133
4.1 Introduction 133
4.2 Analysing Critical Literacy Responses 133
4.3 Questions Power: Dominance and Submission 134
4.3.1 Questions Power: Poem 'Air Raid' (Poem in Appendix F) 134
4.3.2 Questions Power: Picture Book 'The Rabbits' (Appendix F) 137
4.3.3 Questions Power: Short Story 'Little Red' (Appendix F) 139
4.4 Identifying Unspoken Messages In The Text 141
4.4.1 Identifying Unspoken Messages: Poem 'Air Raid' 141
4.4.2 Identifying Unspoken Messages: Picture Book 'The Rabbits' 142
4.4.3 Identifying Unspoken Messages: Short Story 'Little Red' 145
4.5 Questions Absences / Gaps / Silences 147
4.5.1 Questions Absence/Gaps/Silences: Poem 'Air Raid' 147
4.5.2 Questions Absence/Gaps/Silences: Picture Book 'The Rabbits' 147
4.5.3 Questions Absence/Gaps/Silences: Short Story 'Little Red' 150
4.6 Identifying Similarities With Other Texts 152
4.6.1 Similarities with other texts: Poem 'Air Raid' 152
4.6.2 Similarities with other texts: Picture Book 'The Rabbits' 153
4.6.3 Similarities with other texts: Short Story 'Little Red' 156
4.7 Identifying Influences of Own Culture and/or Experiences 157
4.7.1 Influence of own culture/experiences: Poem 'Air Raid' 157
4.7.2 Influence of own culture/experiences: Picture Book 'The Rabbits' 160
4.7.3 Influence of own culture/experiences: Short Story 'Little Red' 162
4.8 Conclusion 164

CHAPTER FIVE: STAGE 1 CASE STUDIES 165
5.1 Introduction 165

5.1.1 Selection Process and Justification of Choice....165
5.2 Introduction....165
5.2.1 Reading Profile....165
5.2.2 Overview of Critical Literacy and Metacognitive Performance....166
5.2.3 Metacognition Profile....172
5.3 Introduction....174
5.3.1 Reading Profile....175
5.3.2 Overview of Critical Literacy and Metacognitive Performance....175
5.3.3 Metacognition Profile....182
5.4 Introduction....184
5.4.1 Reading Profile....184
5.4.2 Overview of Critical Literacy and Metacognitive Performance....185
5.4.3 Metacognition Profile....189
5.5 Introduction....191
5.5.1 Reading Profile....192
5.5.2 Overview of Critical Literacy and Metacognitive Performance....193
5.3.6 Metacognition Profile....197

CHAPTER SIX: STAGE 2 CASE STUDIES....200
6.1 Introduction....200
6.1.1 Selection Process and Justification of Choice....200
6.2 Introduction....200
6.2.1 Reading Profile....200
6.2.2 Overview of Critical Literacy and Metacognitive Performance....201
6.3.1 Metacognitive Behaviours....207
6.3 Introduction....209
6.3.1 Reading Profile....209
6.3.2 Overview of Critical Literacy and Metacognitive Performance....210
6.3.3 Metacognition Profile....215
6.4 Introduction....217
6.4.1 Reading Profile....217
6.4.2 Overview of Critical Literacy and Metacognitive Performance....217
6.4.3 Metacognition Profile....221

CHAPTER SEVEN: STAGE 3 CASE STUDIES....225
7.1 Introduction....225
7.1.1 Selection Process and Justification of Choice....225
7.2 Introduction....225
7.2.1 Reading Profile....225
7.2.2 Overview of Critical Literacy and Metacognitive Performance....226
7.3 Introduction....237
7.3.1 Reading Profile....237
7.3.2 Overview of Critical Literacy and Metacognitive Performance....238
7.3.3 Metacognition Profile....244
7.4 Introduction....246
7.4.1 Reading Profile....246
7.4.2 Overview of Critical Literacy and Metacognitive Performance....246
7.3.6 Metacognitive Behaviours....251
7.5 Introduction....253
7.5.1 Reading Profile....253
7.5.2 Overview of Critical Literacy and Metacognitive Performance....254
7.5.6 Metacognition Profile....259

CHAPTER EIGHT: FINDINGS....261
8.1 Introduction....261
8.2 Critical Literacy Results....261
8.2.1 Critical Literacy Ability Talented Versus Typical Readers....262

8.2.2 Domain-Specific Knowledge and Understanding....264
8.3 Metacognitive Behaviours Results....269
8.3.1 Group 1: Talented Readers - Observed Metacognitive Behaviours....271
8.3.2 Group 2: Possible Talented Readers - Observed Metacognitive Behaviours....278
8.3.3 Group 3: Typical Readers - Observed Metacognitive Behaviours....282
8.5 MARSI and MSI Tools Versus Observation Method....284
8.5.1 Group 1: Talented Readers - Metacognition Self-Report Surveys Compared With Observed Behaviours....285
8.5.2 Group 2: Possible Talented Readers Metacognition Self-Report Surveys Compared With Observed Behaviours....290
8.5.3 Group 3: Typical Readers Metacognition Self-Report Surveys Compared With Observed Behaviours....293
8.6 Metacognition Employed During Critical Literacy....298
8.6.1 Talented Versus Typical Readers' Employment of Metacognition During Critical Literacy Discourse....302
8.7 Language Differences Between Talented and Typical Readers....304
8.7.1 Verbosity....304
8.7.2 Sophistication of Language....306
8.7 Conclusion....307

CHAPTER NINE: DISCUSSION OF RESULTS....308
9.1 Introduction....308
9.2 Research Question 1....308
9.3 Research Question 2....313
9.4 Research Question 3....314
9.5 Research Question 4....315
9.6 Emerging Themes....317
9.6.1 Defining Talented Readers....317
9.6.2 Measuring Metacognition....322
9.7Conclusion....323

CHAPTER TEN: CONCLUSION....324
10.1 Introduction....324
10.2Summary of the Present Study....324
10.3Methodology....324
10.3.1 The Research Process....325
10.4Major Findings....326
10.5 Limitations of this Study....329
10.6 Implications of the Major Findings for Practice....331
10.7 Considerations for Future Research....332
10.8 Conclusion....334

REFERENCES....337
APPENDICES....357

List of Tables

2.1	NAPLAN Reading Results in the highest bands across Year groups	24
2.2	Comparison of Sternberg's (1981) componential theory of intellectual giftedness and Tarricone's (2011) taxonomy of metacognition assertions	80
3.1	Range Distribution of Participants in the Primary Study	108
3.2	Participants nominated as talented readers and validated with PAT-R	110
3.3	Participants nominated as talented readers with typical PAT-R results	111
3.4	Participants nominated as typical readers with talented PAT-R results	111
3.5	Participants nominated as typical readers and validated with PAT-R test	112
3.6	Participants who did not complete the PAT-R test	112
3.7	Overview of participants in the study	113
3.8	Participants selected for case studies	114
3.9	Matrix for collating critical literacy competency results	117
3.10	Overview of Texts [using Afflerbach's (2002) Aspects of the Verbal Reporting and Protocol Analysis Methodology that Require Detailed Descriptions]	118
3.11	Text Level, Difficult and Themes [Using Afflerbach's (2002) Aspects of the Verbal Reporting and Protocol Analysis Methodology that Require Detailed Descriptions].	119
5.1	Michael: Overview of Critical Literacy and Metacognitive Performance	167
5.2	Michael: Collated Poor Responses	171
5.3	Michael: Critical Literacy Response Scores	171
5.4	Michael: Overview of Observed Metacognitive Behaviours	173
5.5	Michael: Overview of MARSI Scores	174
5.6	Sarah: Overview of Critical Literacy and Metacognitive Performance	176
5.7	Sarah: Overview of Critical Literacy Response Scores	182
5.8	Sarah: Overview of Observed Metacognitive Behaviours	183
5.9	Lee: Overview of Critical Literacy and Metacognitive Performance	185
5.10	Lee: Collated Poor Responses	188
5.11	Lee: Overview of Critical Literacy Response Scores	189
5.12	Lee: Overview of Observed Metacognitive Behaviours	190
5.13	Lee: Overview of MARSI Scores	191
5.14	Bradley: Overview of Critical Literacy and Metacognitive Performance	193
5.15	Bradley: Collated Poor Responses	196
5.16	Bradley: Overview of Critical Literacy Response Scores	197
5.17	Bradley: Overview of Observed Metacognitive Behaviours	198
5.18	Bradley: Overview of MARSI Scores	199
6.1	Sian: Overview of Critical Literacy and Metacognitive Performance	202
6.2	Sian: Collated Poor Responses	206
6.3	Sian: Overview of Critical Literacy Response Scores	206
6.4	Sian: Overview of Observed Metacognitive Behaviours	207

6.5	Sian: Overview of MARSI and MSI Results	208
6.6	Allan: Overview of Critical Literacy and Metacognitive Performance	210
6.7	Allan: Collated Poor Responses	214
6.8	Allan: Overview of Critical Literacy Response Scores	214
6.9	Allan: Overview of Observed Metacognitive Behaviours	215
6.10	Allan: Overview of MARSI and MSI Results	216
6.11	Leila: Overview of Critical Literacy and Metacognitive Performance	218
6.12	Leila: Collated Poor Responses	220
6.13	Leila: Overview of Critical Literacy Response Scores	221
6.14	Leila: Overview of Observed Metacognitive Behaviours	222
6.15	Leila: Overview of MARSI and MSI Results	223
7.1	Isla: Overview of Critical Literacy and Metacognitive Performance	226
7.2	Isla: Overview of Critical Literacy Response Scores	227
7.3	Isla: Overview of Observed Metacognitive Behaviours	234
7.4	Isla: Overview of MARSI and MSI Results	235
7.5	Jacob: Overview of Critical Literacy and Metacognitive Performance	237
7.6	Jacob: Overview of Critical Literacy Responses	239
7.7	Jacob: Overview of Observed Metacognitive Behaviours	243
7.8	Jacob: Overview of MARSI and MSI Results	244
7.9	Ronald: Overview of Critical Literacy and Metacognitive Performance	246
7.10	Ronald: Overview of Critical Literacy Responses	247
7.11	Ronald: Overview of Observed Metacognitive Behaviours	251
7.12	Ronald: Overview of MARSI and MSI Results	252
7.13	Connor: Overview of Critical Literacy and Metacognitive Performance	253
7.14	Connor: Overview of Critical Literacy Responses	254
7.15	Connor: Overview of Observed Metacognitive Behaviours	258
7.16	Connor: Overview of MARSI and MSI Results	259
8.1	Stage overview of case study participants' critical literacy results	261
8.2	Ability to identify textual features and underlying message of the text in answering the question 'Do you think there is a message in this text?'	265
8.3	Overview of Metacognitive Behaviour Profiles Using 16 Metacognitive Assertions	269
8.4	Michael's metacognitive strategies observed across three sessions	272
8.5	Sarah's metacognitive strategies observed across three sessions	273
8.6	Sian's metacognitive strategies observed across three sessions	275
8.7	Isla's metacognitive knowledge strategies observed across this study	276
8.8	Ronald's metacognitive knowledge strategies observed across this study	277
8.9	Lee's metacognitive knowledge strategies observed across this study	279
8.10	Allan's metacognitive knowledge strategies observed across this study	280
8.11	Jacob's metacognitive knowledge strategies observed across this study	281
8.12	Bradley's metacognitive knowledge strategies observed across this study	282
8.13	Leila's metacognitive knowledge strategies observed across this study	283

8.14	Connor's metacognitive knowledge strategies observed across this study	284
8.15	Michael: Overview of MARSI self-reported inventory results	286
8.16	Sian: Overview of MARSI self-reported inventory results	287
8.17	Sian: Overview of MSI results	288
8.18	Isla: Overview of MARSI self-reported inventory results	288
8.19	Isla: Overview of MARSI self-reported inventory results	289
8.20	Ronald: Overview of MARSI self-reported inventory results	290
8.21	Ronald: Overview of MSI results	290
8.22	Lee: Overview of MARSI self-reported inventory results	291
8.23	Allan: Overview of MARSI self-reported inventory results	292
8.24	Jacob: Overview of MARSI self-reported inventory results	293
8.25	Bradley: Overview of MARSI self-reported inventory results	294
8.26	Bradley: Strategies NOT observed across observation sessions using Tarricone's Metacognitive Taxonomy	295
8.27	Leila: Overview of MARSI self-reported inventory results	296
8.28	Leila: Strategies NOT observed across observation sessions using Tarricone's Metacognitive Taxonomy	296
8.29	Connor: Overview of MARSI self-reported inventory results	297
8.30	Connor: Overview of MSI results	297
8.31	Connor: Strategies NOT observed across observation sessions using Tarricone's Metacognitive Taxonomy	98
8.32	Comparison of Talented and Typical Readers' employment of Tarricone's Metacognitive Assertions During Critical Literacy Discourse	302
8.33	Case studies: response word counts	305
8.34	Examples of advanced language and phrasing	306

List of Figures

1.1	PISA: Australian media coverage, December 2007	2
2.1	Reis et al. (2004) collated characteristic traits of talented readers	14
2.2	Renzulli's Three-ring conception of giftedness (1976)	18
2.3	Gagné's 2008 differentiated model of giftedness and talent (DMGT 2.0)	20
2.4	Reis' differentiated instructional or curricular strategies to challenge talented Readers	27
2.5	The three cueing system of the reading process	32
2.6	A social model of reading	33
2.7	The difference between critical reading and critical literacy	43
2.8	The four reading practices	45
2.9	Tasmanian Education Department elements of critical literacy	55
2.10	Tarricone's Amplification of Flavell's cognitive monitoring in the conceptual framework of metacognition (2011)	63
2.11	Overview of three scaffolds adopted by different metacognitive models	66
2.12	Tarricone's 2011 conceptual framework of metacognition	68
2.13	Adaptation of Tarricone's subcomponents, categories, supercategories, subcategories and key elements of metacognition as presented in the conceptual framework	69
2.14	Tarricone's (2011) amplification of core-component Knowledge of Cognition	70
2.15	Tarricone's (2011) amplification of core-component Regulation of Cognition	72
2.16	Variable 1. Knowledge of Self and others (KoP) adapted from Tarricone 2011	74
2.17	Variable 2. Knowledge of Tasks (KoT) adapted from Tarricone 2011	75
2.18	Variable 3. Knowledge of Strategies (KoS) adapted from Tarricone 2011	75
2.19	Hacker's theoretical mechanisms of comprehensive monitoring	88
3.1	The research process	100
3.2	Marking criteria determining critical literacy competency	124
3.3	Examples of 'accepted' and 'not accepted' responses	124
3.4	Discourse Analysis Frame (DAF) master	126
3.5	Discourse Analysis Frame (DAF) completed sample	127
3.6	Tarricone (2011) assertions 9.33 and 9.42	128
3.7	Modal words indicating regulation of cognition	129
3.8	Discourse analysis colour coding sample	130
4.1	Competent critical literacy response to Questioning Power[Ronald 12 yrs / Year 6]	135
4.2	Competent critical literacy response to Questioning Power[Lee 7 yrs / Year 2]	136
4.3	Poor quality critical literacy response to Questioning Power[Michael 7 yrs / Year 1	137
4.4	Competent critical literacy response to Questioning Power[Sarah 8 yrs / Year 2]	138
4.5	Poor quality critical literacy response to Questioning Power[Bradley 8 yrs / Year 2]	139
4.6	Competent critical literacy response to Questioning Power[Allan 9yrs / Year 3	140
4.7	Poor Criticalliteracy response to Questioning Power[Alana 8 yrs / Year 3]	141
4.8	Competent critical literacy response to Underlying Message [Jacob 11yrs / Year 5]	142
4.9	Competent critical literacy response to Underlying Message [Heather 8yrs / Year 2]	143
4.10	Competent critical literacy response to Underlying Message [Ronald 12yrs / Year 6]	144
4.11	Competent critical literacy response to Underlying Message [Sarah 8yrs / Year 2]	144

4.12	Competent critical literacy response to Underlying Message [Hayley 11yrs / Year 5]	146
4.13	Competent critical literacy response to Underlying Message [Ronald 12yrs / Year 6]	146
4.14	Competent critical literacy response to Underlying Message [Bonnie 12yrs / Year 6]	148
4.15	Competent critical literacy response to Underlying Message [Ronald 12yrs / Year 6]	148
4.16	Competent critical literacy response to Underlying Message [Simon12yrs / Year 6]	149
4.17	Competent critical literacy response to Underlying Message [Cooper 10yrs / Year 5]	149
4.18	Competent critical literacy response to Underlying Message [Isla 10yrs / Year 5]	151
4.19	Competent critical literacy response to Underlying Message [Bradley 8yrs / Year 2]	151
4.20	Competent critical literacy response to Identifying Similarities [Bob 9yrs / Year 4]	153
4.21	Competent critical literacy response to Identifying Similarities [Leila 9yrs /Year 4]	153
4.22	Competent critical literacy response to Identifying Similarities [Noah 8yrs / Year 2]	154
4.23	Competent critical literacy response to Identifying Similarities [Cooper 10yrs / Year 5]	155
4.24	Competent critical literacy response to Identifying Similarities [Steven 7yrs / Year 1]	156
4.25	Competent critical literacy response to Identifying Similarities [Isla 10yrs /Year 5]	157
4.26	Competent critical literacy response to Identifying Similarities [Isla 10yrs / Year 5]	158
4.27	Competent critical literacy response to Own Experiences/Culture [Nathan 9yrs / Year 3]	159
4.28	Competent critical literacy response to Own Experiences/Culture [Simon 12yrs /Year 6]	160
4.29	Competent critical literacy response to Own Experiences/Culture [Heather 8yrs / Year 2]	161
4.30	Competent critical literacy response to Own Experiences/Culture [Ava 11yrs / Year6]	162
4.31	Competent critical literacy response to Own Experiences/Culture [Audrey 12yrs / Year 6]	163
4.32	Competent critical literacy response to Own Experiences/Culture [Alan 9yrs / Year 3]	164
5.1	DAF: Michael - Picture Book Question 2	168
5.2	DAF: Michael – Poem Question 6	169
5.3	DAF: Michael – Picture Book Question 4	170
5.4	DAF: Sarah – Picture Book Question 10	178
5.5	DAF: Sarah – Poem Question 5	179
5.6	DAF: Sarah – Picture Book Question 11	180
5.7	DAF: Sarah – Poem Question 9 and Question 7	181
5.8	DAF: Lee – Poem Question 5	186
5.9	DAF: Lee – Poem Question 9	187
5.10	DAF: Lee – Picture Book Question 10	187
5.11	DAF: Bradley – Short Story Question 15	193
5.12	DAF: Bradley – Picture Book Question 3	193
6.1	DAF: Sian – Poem Question 4	204
6.2	DAF: Sian – Poem Question 10	205
6.3	DAF: Allan – Picture Book Question 2	211
6.4	DAF: Allan – Picture Book Question 14	212
6.5	DAF: Allan – Short Story Question 8	212
6.6	DAF: Allan – Short Story Question 15	213
6.7	DAF: Allan – Picture Book Question 4	213
6.8	DAF: Leila – Poem Question 6	219

6.9	DAF: Leila – Poem Question 9	219
7.1	DAF: Isla – Picture Book Question 15	228
7.2	DAF: Isla – Picture Book Question 2	229
7.3	DAF: Isla – Poem Question 3	230
7.4	DAF: Isla – Poem Question 4	231
7.5	DAF: Isla – Short Story Question 10	232
7.6	DAF: Isla – Short Story Question 16	233
7.7	DAF: Jacob – Poem Question 7	239
7.8	DAF: Jacob – Picture Book Question 8	240
7.9	DAF: Jacob – Picture Book Question 15	241
7.10	DAF: Jacob – Picture Book Question 7	242
7.11	DAF: Ronald – Picture Book Question 13	247
7.12	DAF: Ronald – Short Story Question 7	248
7.13	DAF: Ronald – Short Story Question 15	249
7.14	DAF: Ronald – Poem Question 9	250
7.15	DAF: Connor – Poem Question 4	255
7.16	DAF: Connor – Picture Book Question 11	256
7.17	DAF: Connor – Picture Book Question 2	257
8.1	Comparison of Stage 1 Critical Literacy Answers	261
8.2	Comparison of Stage 3 Critical Literacy Answers	262
8.3	Comparison of Stage 3 Critical Literacy Answers	263
8.4	DAF: Leila – Poem Question 3	301
9.1	Modified Gagné's DMGT 2.0 (2008) defining Talented Readers	321

List of Abbreviations and Acronyms

ACARA	Australian Curriculum, Assessment and Reporting Authority
ARA	Average-reading ability
BRT	Blooms' Revised Taxonomy
CDA	Critical Discourse Analysis
CL	Critical Literacy
C.Ind.Le	Cambridgeshire Independent Learing in the Foundation Stage
DAF	Discourse Analysis Frame
DMGT	Differentiated Model of Gifted and Talented – Francoys Gagne
ERAS	Elementary Reading Attidue Survey
fMRI	functional Magnetic Resonance Imaging
G&T	Gifted and Talented
K–6	Kindergarten to Year 6 (primary / elementary grades)
KoC	Knowledge of Cognition / Metacognitive Knowledge
KoP	Knowledge of Self and Persons
KoS	Knowedge of Strategies
KoT	Knowledge of Tasks
MARSI	Metacongitive Awareness of Reading Strategies
MSI	Metacomprehension Strategy Index
NAPLAN	National Assessment Program–Literacy and Numeracy
RoC	Regulation of Cognition / Metacognitive Regulation
NSW	New South Wales
NSWDET	New South Wales Department of Education and Training
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
SFG	Systemic Functional Grammar
TA	Think Aloud or Think Aloud Protocols

Glossary

Cognition: The act or process of knowing including both awareness and judgement.

Comprehension: Comprehension is the process through which understanding is derived through the construction of an internal representation of a text. It is a process that occurs in parallel at several levels, with a special kind of text representation being associated with each level and with the outputs of each level interacting in important ways (Hacker, 2009, p. 170).

Conditional Knowledge: 'involves knowing when and why to use declarative and procedural knowledge' (Tarricone, 2011, p. 165).

Critical Literacy: is an analytical process that critiques the language of texts identifying bias, inequitable social practices and issues of power while encouraging reflection, transformation and action.

Declarative Knowledge: 'is stable, familiar, constant, established long-term knowledge which involves self-knowledge, self-awarness and a sensitivy to and evaluation of this knowledge. It also includes knowledge of oneself and others as cogntive beings, of tasks and task demands, and of strategies ... is knowing when and what you know and do know know, including what you need to know... (is) reliant uposn reflection and verbalisation, it can be statable but it can also be fallible as facts known about cognition can be incorrect' (Tarricone, pp. 156-7).

Discourse analysis: is the study of language-in-use … the study of language as used in the world, not just to say thngs, but to do things (Gee, 2011).

ERAS: Elementary Reading Attitude Survey by Michael McKenna and Dennis Kear (1990).

Epistemic Beliefs: An individual's conceptualisation of knowledge and knowing. How an individual values and thinks about knowledge in general or subject-specific knowledge. Epistemic beliefs shape a learner's expectations, appreciation and motivation towards completing a task.

Knowledge of Cognition: is defined as the knowledge individuals have about their own, and others' cognition. It includes knowledge of learning strengths and weaknesses, and the particular strategies required of specific situations, especially in complex problems. It involves self-awareness relying upon self-knowledge and self-appraisal through reflectivity. It is affected by the self-system components including self-esteem, attributional beliefs, and sensitivity to personal beliefs, the task and strategies required. Knowledge of cognition includes declarative, procedural and conditional knowledge (Tarricone, 2011).

Knowledge of Self and Persons: 'Knowledge of oneself or self-knowledge and knowledge of others as cognitive beings' (Tarricone, 2011, p. 158). It is a variable of declarative, procedural and conditional knowledge.

Knowledge of Strategies: 'Is the awareness and understanding of the applicability of strategies for a particular task which addresses task objectives' (Tarricone, 2011, p. 150). It is a variable of declarative, procedural and conditional knowledge.

Knowledge of Tasks: 'Involves knowledge, understanding and awareness of the task including its nature, structure, goals and objectives. This knowledge supports the selection and application of task-specific strategies, facilitating task completion and problem solution' (Tarricone, 2011, p. 150). It is a variable of declarative, procedural and conditional knowledge.

Procedural Knowledge 'Refers to knowledge of processes and actions or essentially knowing how (Tarricone, 2011, p. 160).

MARSI: The Metacognitive Awareness of Reading Strategies Inventory by Kouider Mokhtari and Carla Reichard © 2002.

Meta-comprehension: 'Comprehension monitoring ... entails reflection, self-regulation and monitoring to ensure ongoing successful comprehension when reading and listening' (Tarricone, 2011, pp. 180-181).

Meta-memory: Knowledge about one's own memory processes and contents. Sometimes referred to as theory-of-mind.

Metacognition: 'Knowledge of cognition' or *knowing about* one's own cognitive processes, and 'regulation of cognition'involving the *use* of one's own cognitive processes(Brown, 1978; Dunlosky & Metcalf, 2009; Larkin, 2010; Israel et al., 2005; Pressley, Borkowski & O'Sullivan, 1984; Veenman et al., 2005).

Metacognitive Control: Regulating an aspect of a cognitive process; making decisions about strategies or time to solve or answer a problem.

Metacognitive Experiences: 'Involve metacognitive judgements, feelings or experiences during problem solving and tend to be person-generated or related ... are considered to be feelings, judgments, reactions and experiences which occur during a cogntive task or problem solving' (Tarricone, 2011, p. 172).
Metacognitive Knowledge: Knowledge about how learning operates and how to improve one's learning.
Metacognitive Monitoring: Judging or assessing how well you are understanding or approaching a problem.
Metacognitive Skilfulness or Metacognitive Strategic Knowledge: The regulation of, and control over one's cognitive processes and learning (Veenman, et al., 2005b; 2006). 'Knowing that' and 'knowing how' are not the same as 'using'. Metacognitive Skilfulness is the actual process of *using* Declarative and Procedural Knowledge.
Metalanguage: The specialist language used to describe language within a field such as literacy.
MSI: Metacomprehension Strategy Index by Schmitt (1990).
Praxis: Practice as opposed to theory.
Reading: 'Reading is the process of constructing meaning from text, whether written or graphic, paper-based or digital' (Winch & Holliday 2009, p.3). The act of reading involves constructing meaning from text through the skills of decoding, semantic pragmatic and critical competence. Freebody & Luke (1990) described these skills as the four reading resources of code breaker, meaning maker, text user and text analyst or critic.
Regulation of Cognition: 'Involves metacognitive processes that facilitate and support the evaluation and control of the learning process and is especially important to facilitate problem solving ... include(ing) predictng, planning, congitive monitoring, diagnosing, regulating, checking and evaluating learning processes, difficultes and outcomes in problem solving situations' (Tarricone, 2011, p. 166).
Self-regulation: 'Involves processes such as control, monitoring and regulation of learning processes, planning, organising, self-instruction, self-monitoring and self-evaluation' (Tarricone, 2022, p. 168).
Signifier: An element that creates any sort of meaning, such as a word, image, symbol, grammatical structure, figurative device etc.
Situated meaning:'is an image or pattern that we assemble "on the spot" as we communicate in a given context, based on our construal of that context and on our past experiences' (Gee, 1999, p. 47).
Structured learning: The programmed learning opportunities presented in school, sport organisation or conservatory for example.
Talented Readers (TR): Students who are reading at an advanced level compared with their same-age peers. Gagné's DMGT 2.0 model identifies this population as those who are performing in the top 10% of their age peers. Reis (2006) identifies this population as those who are reading at least 24 months beyond their chronologicial age in age-appropriate standardised reading tests.
Typical Readers: Students reading at a level commensurate with their chronological age, as determined by standarised reading tests.