

**PROMOTION OF INCLUSION BY THE EDUCATIONAL PSYCHOLOGIST
THROUGH THE USE OF ACCOMMODATIONS
IN SOUTH AFRICAN INDEPENDENT HIGH SCHOOLS**

by

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Date: 9 November 2020

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ABSTRACT

Inclusion is a dynamic and evolving global movement that embraces diversity. Accommodations have become an important instrument in the inclusion process. Accommodations allow learners experiencing barriers to learning to access the general curriculum and perform optimally in examinations.

Inclusion and the associated accommodations are context-dependent, although inclusion and accommodations in South Africa have not developed in isolation. Therefore, from an international and national perspective, legislation and policies that influence the inclusive process in America, Finland, Australia and South Africa, were investigated. From the perspective of the independent high schools (IEB) in South Africa, the *IEB Policy and Procedures: Accommodations and Exemptions* underpins the accommodation process which involves accommodations in setting, scheduling presentation and response (IEB 2018).

Against the backdrop of legislation and policies, the study focuses on the educational psychologist's role as a key stakeholder in the IEB's accommodations and associated support process. In accordance with Bronfenbrenner's bio-ecological model, the implementation of accommodations and support is founded on the creation of positive interactions and alliances in varying contexts. Barriers to learning in reading and written expression, coupled with cognitive neuroscience that underpins many accommodations, were investigated with the purpose of determining how best to support learners.

A literature review provided the background to an empirical inquiry aligned to the qualitative research approach. A two-layered phenomenological research strategy of inquiry was adopted, consisting of two groups of participants, namely school psychologists and learners between Grades 9 to 11 who had procured IEB accommodations. Stratified random sampling initially identified the schools in South Africa, followed by purposeful sampling in selecting the school psychologist and learner participants. Data was collected by means of 18 semi-structured interviews, observation and a research diary.

Data analysis showed that several resource-based challenges were experienced, such as physical, financial, human and time. Furthermore, parental influence and fairness of

the IEB accommodation review were evidenced as challenges. In contrast to the challenges, learners improved academic performance and heightened personal development were noted by both the school psychologist and learner participants as advantages of accommodations.

Recommendations for the improvement of practice were made based on the findings.

KEY TERMS

Accommodations; barriers to learning; cognitive neuroscience; educational psychologist; inclusion; independent high schools; reading comprehension; reading rate or fluency; spelling accuracy; word reading accuracy.

OPSOMMING

Insluiting is 'n dinamiese, groeiende wêreldwye beweging wat hom vir diversiteit beywer. Akkommodering is 'n belangrike instrument in die bevordering van diversiteit en help leerders met leerhindernisse om toegang tot die algemene kurrikulum te verkry en in die eksamen optimaal te presteer.

Ofskoon insluiting en die gepaardgaande akkommodering deur die konteks bepaal word, het dit in Suid-Afrika nie in isolasie ontwikkel nie. Daarom is die wetgewing en beleide wat die insluitingsproses in Amerika, Finland, Australië en Suid-Afrika bepaal, uit 'n internasionale en nasionale perspektief verken. Vir onafhanklike hoërskole in Suid-Afrika lê die *IEB Policy and Procedures: Accommodations and Exemptions* ten grondslag aan die akkommodering ten opsigte van omgewing, skeduleringvoorlegging en reaksie (IEB 2018).

In die lig van die wetgewing en beleide word die rol van die opvoedkundige sielkundige in die IEB se akkommodering en die steun wat daarmee gepaard gaan, in hierdie studie ondersoek. Volgens Bronfenbrenner se bio-ekologiese model bepaal positiewe interaksie en bondgenootskappe in verskillende kontekste die implementering van akkommodering en steun. Leerhindernisse in lees en skriftelike uiting sowel as kognitiewe neurowetenskap, waarop talle akkommoderings berus, is verken om vas te stel hoe leerders die beste gehelp kan word.

'n Literatuuroorsig was die grondslag van 'n empiriese ondersoek en 'n kwalitatiewe navorsingsbenadering. 'n Tweeledige fenomenologiese navorsingstrategie is gevolg en twee groepe het aan die studie deelgeneem, te wete skoolsielkundiges en leerders in Graad 9 tot 11 vir wie IEB-akkommodering voorsien is. Die skole in Suid-Afrika is deur gestratifiseerde ewekansige steekproewe geïdentifiseer en die skoolsielkundiges en leerders deur doelgerigte steekproefneming gekies. Data is by wyse van 18 halfgestruktureerde onderhoude, waarneming en 'n navorsingsdagboek ingesamel.

Volgens die dataontleding is daar verskeie hulpbronnuitdagings. Hieronder tel fisieke, finansiële, menslike en tyduitdagings asook ouerinvloed en die billikheid van die IEB-akkommoderingsoorsig. Ondanks die uitdagings het sowel die skoolsielkundiges as die

leerders op verbeterde akademiese prestasie en aansienlike persoonlike ontwikkeling as voordele van akkommodering gewys.

Ten slotte is aanbevelings op grond van die bevindings gemaak om die praktyk te verbeter.

SLEUTELBEGRIPPE

Akkommodering; leerhindernisse; kognitiewe neurowetenskap; opvoedkundige sielkundige; insluiting; onafhanklike hoërskole; leesbegrip; leestempo of vlotheid; spellingakkuraatheid; woordleesakkuraatheid.

NGAMAFUPHI

Uhlelo olufuaka wonke umfundi wuhlelo oluguququkayo futhi olujikeleza umhlaba wonke, oluphinde futhi lufake ukwehlukahlukana. Izinhlelo zokwamukelwa kwabafundi abakhubazekile seziphenduke ithuluzi elisemqoka ngaphansi kohlelo oluxuba wonke umfundi. Izinhlelo zokwamukelwa kwabafundi abakhubazekile zivumela abafundi abanenkinga yokufunda ukuba bakwazi ukuthola ikharikhulamu yonke futhi basebenze ngokusezingeni eliphezulu kuzivivinyo.

Uhlelo oluxuba wonke umfundi kanye nezinhlelo ezihambisana nokwamukelwa kwabafundi abakhubazekile zencike phezu kwesizinda, yize uhlelo oluxuba wonke umfundi kanye nezinhlelo ezamukela abafundi abahlukahlukene eNingizimu Afrika zingakaze zithuthuke zodwana. Ngalokho-ke, ngokomqondo wezwe nowomhlaba, imithetho eshayiwe kanye nemigomo enomthelela phezu kohlelo oluxuba wonke umfundi eMelika, eFinland, e-Australia kanye naseNingizimu Afrika, ziye zaphenywa. Ngokomqondo wezikole eziphakeme ezizimele (IEB) eNingizimu Afrika, phecelezi *i-IEB Policy and Procedures: Accommodations and Exemptions* zichaza uhlelo lokwamukelwa kwabafundi abakhubazekile oluxuba phakathi izindawo zokuhlaliswa ngaphansi kwesizinda, ukuhlela izinkathi zokwethula izinkulumo Kanye nesikhathi sezimpendulo (IEB 2018).

Lokhu kumayelana nomthetho oshayiwe Kanye nemigomo ethi ucwaningo lugxile phezu kwendima yosolwazi wezengqondo kwezemfundo njengomdlalindima oqavile ohlelweni lwezinhlelo zokwamukela abafundi abakhubazekile ezikolweni eziphakeme ezizimele Kanye nohlelo oluhambisana nokuxhasa (*IEB's accommodations and associated support process*). Ngokwemodeli kaBronfenbrenner ye-ikholoji yempilo, ukusetshenziswa kwezinhlelo zokuhlalisa abafundi Kanye noxhaso oluhambisana nalokhu kwatholakala phezu kokwakhiwa kwezenzo ezinhle zokuhlangana Kanye nokusebenzisana okwenzeka kwezinye izizinda ezahlukahlukene. Izihibhe eziphazamisa uhlelo lokufunda eziphawuleka uma kufundwa futhi nangesikhathi kubhalwa, lokhu kuhambisana nenyurosayensi yokusebenza kwengqondo okuchaza izinhlelo eziningi zokwamukelwa kwabafundi abakhubazekile, kuye kwaphenywa ngenhloso yokuthola ukuthi ngabe abafundi bangaxhaswa kangcono kanjani.

Ukubuyezwa kombhalo wobuciko kuveze umlando kwiphenyo eliphathekayo elihambisana nendlela yocwaningo eyencike kwingxoxo (*qualitative research approach*). Amasu ocwaningo azigaxazimbili efenomenoloji ophenyo aye alandelwa, aqukethe amaqembu amabili abadlalindima, wona yilawa alandelayo; osolwazi bezengqondo besikole Kanye nabafundi abaphakathi kwebanga iGreyidi 9 ukufikela ku11 abahlinzeke ngezindawo zokuhlala ezikoleni eziphakeme ezizimele (IEB). Uhlelo lwesampula olubizwa nge (*stratified random sampling*) ekuqaleni lukhethe izikole eNingizimu Afrika, kwalandelwa ngokwenza isampuli enenhloso uma kukhethwa usolwazi wezengqondo Kanye nabadlalindima abangabafundi. Idatha yaqoqwa ngokusebenzisa izinhlobo ezimbaxambili eziyi-18, ngokubheka okwenzekayo Kanye nokusebenzisa idayari yocwaningo.

Ukuhlaziywa kwedatha kuveze izinselelo ezimbalwa ezencike kwimithombo ezinjengezinselelo eziphathekayo, ezezimali, ezifaka umuntu Kanye nesikhathi ngaphandle komthelela womzali Kanye nohlelo olungathathi uhlangothi lokubuyezwa kohlelo lokuhlaliswa kwabafundi abakhubazekile ezikoleni eziphakeme ezizimele. Ukuphikisana nezinselele, izinga lokusebenza kwabafundi kwezemfundo lithuthukile kwaphakamisa izinga lokuthuthuka komuntu kuyizinto eziye zaphawulwa yizinhlobo ezimbili ezingusolwazi wezengqondo esikoleni Kanye nomfundi ongumdlalindima, kanti kuthethwe njengamathuba amahle ezinhlelo zokwamukelwa kwabafundi abakhubazekile.

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TABLE OF CONTENTS

CHAPTER 1	1
INTRODUCTION ORIENTATION, STATEMENT OF THE PROBLEM, AIM OF THE STUDY AND CLARIFICATION OF CONCEPTS	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND TO THE PROBLEM	2
1.2.1 Awareness of the problem.....	3
1.2.2 The need to conduct research.....	6
1.2.3 Literature overview and theoretical foundation	7
1.2.4 Section 1: Legislation and policies that underpin international and national inclusion and accommodations	12
1.2.4.1 Legislation and policies that underpin inclusion and accommodations in America..	12
1.2.4.2 Legislation and policies that underpin inclusion and accommodations in Finland ...	13
1.2.4.3 Legislation and policies that underpin inclusion and accommodations in Australia .	14
1.2.4.4 Legislation and policies that underpin inclusion and accommodations in South Africa15	
1.2.4.5 The IEB Policy and Procedures: Accommodations and Exemptions (2018) document	16
1.2.4.6 Intellectual and academic assessments for accommodation purposes in independent high schools.....	16
1.2.4.7 Prescribed IEB assessment tools	16
1.2.4.8 Limitations of prescribed IEB assessment tools.....	18
1.2.5 Types of accommodation	18
1.2.5.1 Setting accommodation.....	19
1.2.5.2 Scheduling accommodation	19
1.2.5.3 Presentation accommodation	20
1.2.5.4 Response accommodation	20
1.2.6 Section 2: Barriers to learning in reading that may attract accommodations	21
1.2.6.1 Word reading accuracy	21
1.2.6.2 Reading rate or fluency	22
1.2.6.3 Reading comprehension	23
1.2.3.4 Dyslexia	23
1.2.6.5 Aphasia.....	24
1.2.7 Barriers to learning in written expression that may attract accommodations	24
1.2.7.1 Spelling accuracy	24
1.2.7.2 Clarity or organisation of written expression	25
1.2.7.3 Writing rate.....	25
1.2.8 Accommodations.....	26

1.2.8.1	Advantages of the use of accommodations	26
1.2.8.2	Challenges of the use of accommodations	26
1.2.8.3	Perceptions of learners of how well accommodations work	28
1.2.9	The role of the educational psychologist in supporting learners with accommodations	29
1.3	DELIMITATION OF RESEARCH FIELD.....	30
1.4	STATEMENT OF THE RESEARCH PROBLEM.....	31
1.5	AIM AND OBJECTIVES OF THE STUDY	31
1.5.1	Primary aim.....	32
1.5.2	Objectives	32
1.5.2.1	Research sub-questions.....	32
1.5.2.2	Research objectives in exploring sub-research questions	32
1.6	CONCEPTUAL FRAMEWORK: SCOPE, OPERATIONAL DEFINITIONS AND SIGNIFICANCE OF STUDY	33
1.6.1	Inclusion.....	33
1.6.2	Barriers to learning.....	33
1.6.3	Accommodations' function	34
1.6.4	Independent schools	35
1.6.5	Cognitive neuroscience	35
1.6.6	Educational psychologist.....	35
1.7	RESEARCH DESIGN.....	37
1.7.1	Ethical considerations	37
1.8	RESEARCH PLAN	38
1.9	CONCLUSION	38
CHAPTER 2		40
LITERATURE REVIEW OF LEGISLATION AND POLICIES THAT UNDERPIN INCLUSION AND ACCOMMODATIONS		40
2.1	INTRODUCTION.....	40
2.2	LEGISLATION AND POLICIES THAT UNDERPIN INTERNATIONAL AND NATIONAL INCLUSION AND ACCOMMODATIONS	42
2.2.1	Legislation and policies that underpin inclusion and accommodations in America..	43
2.2.1.1	Americans with Disabilities Act (ADA)	43
2.2.1.2	Section 504 of the Rehabilitation Act (1973).....	43
2.2.1.3	Individuals with Disabilities Education Act (IDEA).....	44
2.2.2	Legislation and policies that underpin inclusion and accommodations in Finland ...	46
2.2.3	Legislation and policies that underpin inclusion and accommodations in Australia .	49
2.2.4	Legislation and policies that underpin inclusion and accommodations in South Africa	51

2.3	THE IEB POLICY AND PROCEDURES: ACCOMMODATIONS AND EXEMPTIONS (2018) DOCUMENT	52
2.3.1	Procedural route for an accommodation in independent high schools	53
2.3.2	Documents and testing requirements for an IEB accommodation application.....	54
2.3.3	Barriers to learning for which an IEB accommodation may be granted.....	56
2.3.4.1	The Wechsler Intelligence Scale for Children–Fourth Edition (WISC–IV)	58
2.3.4.2	The Wechsler Intelligence Scale for Children–Fifth Edition (WISC–V).....	59
2.3.4.3	The Wechsler Adult Intelligence Scale–Fourth Edition (WAIS–IV).....	60
2.3.4.4	The Senior South African Individual Scale-Revised (SSAIS–R)	61
2.3.4.5	Academic tests.....	62
2.4	LIMITATIONS OF PRESCRIBED IEB ASSESSMENT TOOLS	63
2.5	TYPES OF ACCOMMODATION	65
2.5.1	Setting accommodation.....	66
2.5.2	Scheduling accommodation	67
2.5.3	Presentation accommodation	69
2.6	CONCLUSION	71
CHAPTER 3		72
ACCOMMODATIONS FOR READING AND WRITTEN EXPRESSION BARRIERS		72
3.1	INTRODUCTION.....	72
3.2	BARRIERS TO LEARNING IN READING THAT MAY ATTRACT ACCOMMODATIONS	75
3.2.1	Word reading accuracy	76
3.2.2	Reading rate or fluency	82
3.2.3	Reading comprehension	85
3.2.4	Dyslexia	89
3.2.4.1	Types of dyslexia	93
3.2.4.2	Identification of dyslexia	93
3.3	BARRIERS TO LEARNING IN WRITTEN EXPRESSION THAT MAY ATTRACT ACCOMMODATIONS	96
3.3.1	Spelling accuracy	96
3.3.2	Grammar and punctuation accuracy.....	98
3.3.3	Clarity or organisation of written expression	99
3.4	THE ROLE OF THE SCHOOL PSYCHOLOGIST IN SUPPORTING LEARNERS WITH ACCOMMODATIONS	104
3.4.1	The school psychologist’s role of support within the microsystem and mesosystem	105
3.4.2	The school psychologist’s role of support within the exosystem and macrosystem	107
3.5	ACCOMMODATIONS	108
3.5.1	Advantages of the use of accommodations	108

3.5.1.1	Opportunity for learners that experience barriers to learning to work optimally	108
3.5.1.2	Development of resilience	109
3.5.1.3	Determining appropriate learning styles and associated study skills.....	110
3.5.2	Challenges of the use of accommodations	111
3.5.2.1	Lack of understanding about accommodations	111
3.5.2.2	Fairness of accommodations.....	112
3.5.2.3	Parental involvement.....	113
3.5.2.4	Quality of the psychologist or psychometrist's report.....	114
3.5.2.5	Cost of the accommodation application process.....	115
3.5.2.6	Shortage of staff and venues.....	116
3.6	PERCEPTIONS OF LEARNERS OF HOW WELL ACCOMMODATIONS WORK .	116
3.7	CONCLUSION	118
CHAPTER 4.....		120
RESEARCH DESIGN AND METHODS.....		120
4.1	INTRODUCTION.....	120
4.2	RATIONALE FOR EMPIRICAL RESEARCH.....	121
4.3	RESEARCH DESIGN.....	121
4.3.1	Research paradigm	122
4.3.2	Research approach	122
4.3.3	Research strategy of inquiry.....	123
4.4	RESEARCH METHODS	124
4.4.1	Selection of participants	124
4.4.2	Data collection.....	130
4.4.2.1	Semi-structured interviews	130
4.4.2.2	Observation.....	134
4.4.2.3	Research diary.....	135
4.4.3	Data analysis	135
4.4.4	Measures for trustworthiness	139
4.4.5	Ethical measures.....	140
4.4.5.1	Ethical issues in the research problem	140
4.4.5.2	Ethical issues in data collection.....	140
4.4.5.3	Ethical issues in data analysis.....	142
4.4.5.4	Ethical issues in writing the report	143
4.5	SUMMARY.....	144
CHAPTER 5.....		145
DATA ANALYSIS AND INTERPRETATION		145
5.1	INTRODUCTION.....	145
5.2	RESEARCH PROCESS.....	146

5.3	DATA ANALYSIS OVERVIEW	152
5.4	DATA REDUCTION	153
5.5	DATA INTERPRETATIONS	156
5.5.1	Theme 1: Inclusion and accommodation policies	156
5.5.1.1	Subtheme 1.1: School psychologist's awareness of inclusion and accommodation policies	156
5.5.1.2	Subtheme 1.2: School psychologists' perceptions of the IEB accommodations and exemptions policy.....	158
5.5.1.3	Subtheme 1.3: Challenges experienced with the distribution of the IEB accommodations policy	159
5.5.1.4	Subtheme 1.4: Limitations of the IEB accommodations and exemptions test battery.....	160
5.5.2	Theme 2: Types of accommodation	161
5.5.2.1	Subtheme 2.1: Types of accommodations accessed at the schools.....	161
5.5.2.2	Subtheme 2.2: Commonly awarded accommodations.....	162
5.5.3	Theme 3: Advantages and challenges of accommodations according to the school psychologists	162
5.5.3.1	Subtheme 3.1: Advantages of accommodations according to learners.....	163
5.5.3.2	Subtheme 3.2: Challenges of accommodations for learners.....	165
5.5.4	Theme 4: Support provided to learners with accommodations	171
5.5.4.1	Subtheme 4.1: The role the school psychologist's knowledge of barriers to learning and cognitive neuroscience plays in shaping support for learners	171
5.5.4.2	Subtheme 4.2: School psychologist's role as coordinator of support	174
5.5.4.3	Subtheme 4.3: Support from an exosystem context	175
5.5.4.4	Subtheme 4.4: Support from the mesosystem and microsystem contexts.....	176
5.5.5	Theme 5: Advantages and challenges of accommodations according to learners	178
5.5.5.1	Subtheme 5.1: Advantages of accommodations according to learners.....	178
5.5.5.2	Subtheme 5.2: Challenges of accommodations for learners.....	182
5.6	REPRESENTING THE DATA	185
5.7	CONCLUSION	186
	CHAPTER 6	187
	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	187
6.1	INTRODUCTION.....	187
6.2	SUMMARY OF THE LITERATURE REVIEWS.....	187
6.3	SUMMARY OF EMPIRICAL RESEARCH FINDINGS	193
6.3.1	Theme 1: Inclusion and accommodation policies	194
6.3.2	Theme 2: Types of accommodation	194
6.3.3	Theme 3: Advantages and challenges of accommodations according to the school psychologists	195

6.3.4	Theme 4: Support provided to learners with accommodations	196
6.3.5	Theme 5: Advantages and challenges of accommodations according to learners	198
6.4	RESEARCH CONCLUSIONS	198
6.4.1	What policies underpin inclusion and accommodations in independent high schools?	199
6.4.2	What is the nature of accommodations available to independent high school learners?	199
6.4.3	What are the educational psychologist's perceptions of the use of accommodations in independent high schools in general?.....	200
6.4.4	What support may the educational psychologist provide to learners who require accommodations?	200
6.4.5	What are the learners' perceptions of the use of accommodations in independent high schools?	202
6.5	RECOMMENDATIONS	202
6.5.1	Recommendations at an IEB level.....	202
6.5.2	Recommendations for the school and school psychologists	204
6.5.3	Recommendations for the learners.....	205
6.6	AVENUES FOR FUTURE RESEARCH.....	206
6.7	LIMITATIONS OF THE STUDY.....	206
6.8	CONCLUDING REMARKS.....	207
	LIST OF REFERENCES	209
	APPENDICES	230
	APPENDIX 1: Ethical Clearance	231
	APPENDIX 2: Proof of Language Editing	233
	APPENDIX 3: Permission letter addressed to IEB Chief Executive Officer	234
	APPENDIX 4: Permission letter addressed to school principals	237
	APPENDIX 5: Confidentiality agreement for school principals	241
	APPENDIX 6: Consent letter addressed to educational psychologists.....	242
	APPENDIX 7: Summary of school psychologists' personal details	246
	APPENDIX 8: Consent letter addressed to parents of prospective participants	247
	APPENDIX 9: Assent letter addressed to prospective learner participants	251
	APPENDIX 10: Personal particulars of learners who participated in the study.....	254
	APPENDIX 11: Transcription of interview with educational psychologist (P1).....	256
	APPENDIX 12: Transcription of interview with educational psychologist (P2).....	262
	APPENDIX 13: Transcription of interview with educational psychologist (P3).....	268
	APPENDIX 14: Transcription of interview with educational psychologist (P4).....	274
	APPENDIX 15: Transcription of interview with educational psychologist (P5).....	279
	APPENDIX 16: Transcription of interview with educational psychologist (P6).....	284
	APPENDIX 17: Transcription of interview with learner (L1)	290

APPENDIX 18: Transcription of interview with learner (L2)	294
APPENDIX 19: Transcription of interview with (L3)	301
APPENDIX 20: Transcription of interview with learner (L4)	306
APPENDIX 21: Transcription of interview with learner (L5)	310
APPENDIX 22: Transcription of interview with learner (L6)	314
APPENDIX 23: Transcription of interview with learner (L7)	318
APPENDIX 24: Transcription of interview with learner (L8)	322
APPENDIX 25: Transcription of interview with learner (L9)	326
APPENDIX 26: Transcription of interview with learner (L10).....	330
APPENDIX 27: Transcription of interview with learner (L11).....	334
APPENDIX 28: Transcription of interview with (L12)	337
APPENDIX 29: Observation schedule for educational psychologist (P4).....	340
APPENDIX 30: Observation schedule for educational psychologist participant (P6).....	341
APPENDIX 31: Research diary for educational psychologist participant (P3)	342
APPENDIX 32: Research diary for educational psychologist participant (P5)	343
APPENDIX 33: Research diary for learner participant (L8).....	344
APPENDIX 34: Research diary for learner participant (L3).....	345
APPENDIX 35: Data codes	346
APPENDIX 36: Themes, subthemes and codes	347
APPENDIX 37: Permission letter from IEB Chief Executive Officer to use content of IEB B1 Policy and Procedure Accommodations and Exemptions.....	348

LIST OF TABLES

Table 1.1	Two sections of literature overview.....	11
Table 2.1	Differences between the Severe Discrepancy model and the Response to Intervention (RTI) model.....	45
Table 2.2	Documents and testing requirements for an IEB accommodations and exemptions application.....	55
Table 2.3	Barriers to learning for which an IEB accommodation may be granted.....	57
Table 2.4	Framework and subtests of the SSAIS–R	62
Table 3.1	Summary of school psychologists' assessment in providing accommodations and ensuing support.....	102
Table 4.1	Analysis of interview questions in relation to the objective, and literature studies .	132
Table 4.2	Summary of pseudonym abbreviations used for school psychologists and learners	138
Table 5.1	Summary of the school psychologist's personal details	148
Table 5.2	Summary of learners' personal details	149

LIST OF FIGURES

Figure 1.1	Inclusive education	1
Figure 1.2	Simple schematic of reading areas in the brain.....	22
Figure 2.1	The three-tiered model of the provision of support.....	47
Figure 2.2	Procedural route for an IEB accommodation	54
Figure 2.3	WISC-IV test framework	59
Figure 2.4	WISC-V test framework	60
Figure 2.5	Test framework of the WAIS–IV	61
Figure 2.6	Types of accommodation.....	66
Figure 3.1	Lateral view of brain lobes, structures and functional areas – anterior/front (left) to posterior/back (right).....	75
Figure 3.2	Neural systems for reading.....	78
Figure 3.3	The multi-tiered structure of support	81
Figure 3.4	Developmental scheme for text fluency	83
Figure 3.5	Simple schematic of areas in the brain associated with aphasia	87
Figure 3.6	Neural signature for dyslexia: Disruption of posterior reading systems	92
Figure 3.7	The bio-ecological model.....	104
Figure 3.8	Supportive interventions for the good of all	119
Figure 4.1	Stratified sampling of school sites.....	126
Figure 4.2	Personal particulars of school psychologists who participated in the study	128
Figure 4.3	Personal particulars of learners who participated in the study.....	129
Figure 4.4	An interlinked, cyclic data analysis process	136
Figure 4.5	The data analysis process	137
Figure 5.1	The data analysis overview.....	153
Figure 5.2	Themes, subthemes and codes.....	155
Figure 5.3	Representation of research data.....	186
Figure 6.1	Overview of the literature reviews	188
Figure 6.2	Summary of the empirical findings – Theme 1–6	193

LIST OF ABBREVIATIONS

ACARA	Australian Curriculum Assessment and Reporting Authority
ADA	Americans with Disability Act
ARACY	Australian Research Alliance for Children and Youth
BAS	British Ability Scales
CRPD	Convention of the Rights of Persons with Disabilities
CTOPP	Comprehensive Test of Phonological Processing
DBE	Department of Basic Education
DBST	District-based Support Team
DDA	Disability Discrimination Act
DoE	Department of Education
DSM-5	Diagnostic and Statistical Manual of Mental Disorders
fMRI	Functional Magnetic Resonance Imaging
IDEA	Individuals with Disabilities Education Act
IDEIA	Individuals with Disabilities Education Improvement Act
IEB	Independent Examination Board
IEP	Individual Education Programme
INDS	Integrated National Disability Strategy
ISASA	Independent Schools Association of South Africa
NAPLAN	National Assessment Programme for Literacy and Numeracy
OTL	Opportunity to Learn
PhAB	Phonological Assessment Battery
PDE	Phonemic Decoding Efficiency
PRI	Perceptual Reasoning Index
PSI	Processing Speed Index
RTI	Response to Intervention
SAT	School Assessment Team
SBST	School-Based Support Team
SSAIS	Senior South African Individual Scale
SSAIS–R	Senior South African Individual Scale-Revised
SBST	School-Based Support Team
SIAS	Screening, Identification, Assessment and Support
SWE	Sight Word Efficiency
TOWRE	Test of Word Reading Efficiency
UN	United Nations
UNISA	University of South Africa
UNESCO	United Nations Educational, Scientific and Cultural Organisations
UNCRC	United Nations Convention for the Rights of the Child
UNCRPD	United Nations Conventions for the Rights of Persons with Disabilities
VCI	Verbal Comprehension Index
WAIS–IV	Wechsler Adult Intellectual Scale-Fourth Edition
WAIS–IV SA	Wechsler Adult Intellectual Scale-Fourth Edition South African
WIAT	Wechsler Individual Achievement
WISC–IV	Wechsler Individual Scale for Children – Fourth Edition
WISC–V	Wechsler Intelligence Scale for Children – Fifth Edition
WMI	Working Memory Index
WRAT	Wide Range Achievement Test

CHAPTER 1

INTRODUCTION ORIENTATION, STATEMENT OF THE PROBLEM, AIM OF THE STUDY AND CLARIFICATION OF CONCEPTS

1.1 INTRODUCTION

Inclusion is a worldwide phenomenon. The United Nations Educational Scientific and Cultural Organization (UNESCO) (1994:11-12) views inclusion as the dynamic process of responding to the diversity of needs of all learners, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organisational arrangements, teaching strategies, resource use and partnership with their communities. Inclusive education thus strives to embrace rather than homogenise differences.

Learners experiencing diverse needs often have unique characteristics and barriers to learning that need to be taken into account to make an inclusive system work effectively. The provision of accommodations is an important step towards making inclusion a practical reality. Accommodations allow learners experiencing barriers to learning the prospect of being able to work to their potential, and they create equal opportunity to perform on assessments (Nel, Nel & Lebeloane 2016:77; Sutton 2011:475-480; Walton, Nel, Hugo & Muller 2009:109).

The need to recognise and celebrate diversity is captured in the following cartoon.

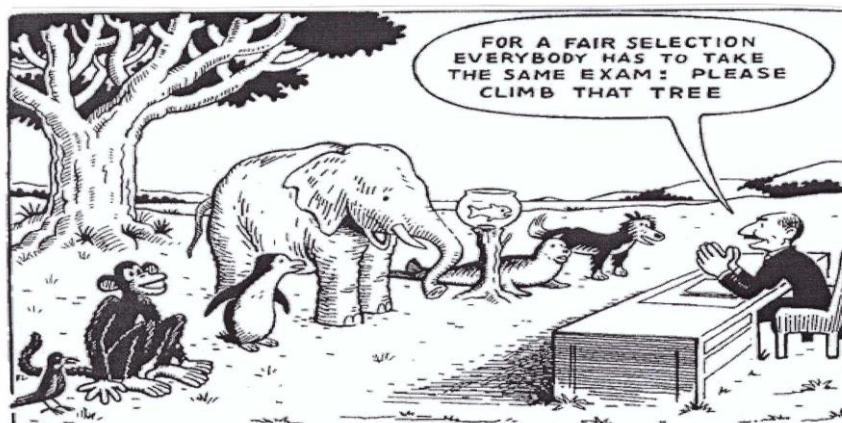


Figure 1.1 Inclusive education

Source: Carson (2013)

1.2 BACKGROUND TO THE PROBLEM

Inclusion is a global movement that embraces diversity. The United Nations and its agency UNESCO have played a significant role in promoting inclusion; the Salamanca Statement (UNESCO 1994) is a key international document that guides inclusive movements and social justice. The Salamanca Statement and Framework for Action (UNESCO 1994) asserts that regular schools with an inclusive orientation are the most effective means of combating discriminatory attitudes, building an inclusive society and achieving education for all.

In South Africa, the Constitution of the Republic of South Africa Act 108 of 1996, together with the South African Schools Act 84 of 1996 and the Education White Paper 6 of 2001, recognise diversity and the provision of quality education for all learners within a single system of education (Nel, Nel & Hugo 2016:8; South Africa 1996a; 1996b). According to the Independent Schools Association of South Africa's (ISASA's) 2002:3) Diversity and Equity Policy, independent schools are also committed to an inclusive model of education: inclusivity of learners experiencing barriers to learning, where feasible educationally, should be encouraged.

Inclusion goes far beyond the physical placement of learners experiencing barriers to learning in general classrooms; the processes of screening, identifying, assessing and supporting learners are crucial elements in the inclusion process. For this purpose, the National Strategy on Screening, Identification, Assessment and Support (SIAS) has been introduced (DBE 2014a). This strategy should enable learners who experience barriers to learning to exercise the right to basic education. At the same time, it outlines new roles and responsibilities for the educational support system to facilitate the accessing and provision of support.

Learners that experience barriers to learning often have unique characteristics that make it difficult for them to demonstrate the full extent of what they know in internal and state-based exams. The provision of accommodations serves the purpose of "levelling the playing field" and allows all learners an equal opportunity to perform on assessments (Goh 2004:28-39).

Four major kinds of accommodations have been identified, based on the function the accommodation is intended to serve. They include: the setting of accommodations, scheduling of accommodations, presentation of accommodations and response to accommodations (Bolt & Roach 2009:43). Accommodations in independent schools recognise the same basic accommodations and the process is structured and guided by the Independent Examination Board's (IEB's) *IEB Policy and Procedures: Accommodations and Exemptions* document (IEB 2018).

Inclusion and inclusive practices, such as accommodations, have far-reaching implications. The implementation of these educational principles may necessitate a shift in culture, strategies and practices in order to embrace the resultant diversity. However, while many countries appear committed to inclusion in their rhetoric and even in their legislation and policies, the implementation and practices are fraught with difficulties and often fall short (Mitchell 2010:13). Wildeman and Nomdo (2007:30) suggest that financial constraints, insufficient planning and a dearth of adequate resources are important reasons for the poor implementation of inclusive practices.

1.2.1 Awareness of the problem

Through the researcher's work as both a learning support therapist and educational psychologist at an independent school, and as a member of the IEB Accommodations Panel, it became apparent that the introduction of inclusive education in South Africa has been accompanied by an urgent need for sustainable and feasible means that would enable schools to embrace inclusion. To this end, the researcher became increasingly aware of the accommodations process, which appears to offer a lifeline of support to a broad spectrum of learners experiencing barriers to learning.

Accommodations help to make assessments equally accessible to all learners and they ensure a valid assessment of the learner's true abilities. Accommodations allow learners experiencing barriers to learning an equal opportunity to perform on tests, but they do not provide them with an unfair advantage over other learners. The construct of the test is not altered when an accommodation is exercised (Bolt & Roach 2009:14; Boucher 2016:87; Goh 2004:39-59).

The implementation of an accommodations system that is accessible to all learners and ensures that ethical and standardised procedures are upheld in the assessment, reviewing and implementation processes is complex and potentially problematic. From the outset the researcher became aware that the authentic concept of accommodations implies a paradigm shift from the “medical deficit” model of diagnosis and treatment of “learner deficits” to a bio-ecological model that views barriers to learning as a dynamic interaction between all the systems involved in the individual learner’s life (Swart & Pettipher 2019:17-19). This paradigm shift appears to be problematic in some independent schools and the use of accommodations remains underpinned by thinking that is embedded in the medical deficit model. In these instances, the accommodation is viewed as an opportunity to fix a deficit in the learner and no inclusive support beyond the accommodation is considered.

The researcher became aware that accessibility to accommodations is a further problem pertaining to the accommodation process. Accessibility to accommodations in independent schools, is not underscored by a set policy that guides the identification, tracking and possible accommodation of learners experiencing barriers to learning in primary school. In an independent school, a formal application for an accommodation may only be made in high school from Grade 8. At this point, the accommodation process is initially motivated by the school and/or parents and there is significant variance in the drive to access accommodations. At times, the school and/or parent’s desire to procure an accommodation appears to cloud judgement, and there is a risk that the principal essence of fairness in accommodations may be overshadowed by the perceived advantages that accompany an accommodation.

As opposed to the experienced excessive school and parental pursuit of accommodations, some schools and parents are not well-informed about accommodations; they are not proactive in their efforts to initiate the accommodations process. Learners experiencing barriers to learning may thus be delayed from receiving the possible benefits of an accommodation, and in some cases may never be identified as a candidate for an accommodation.

A further concern with regard to accessibility of accommodations is that the application and assessment fees that accompany an accommodation application are costly. In many independent schools the onus is on the parents to meet this expense. Family

financial constraints may thus jeopardise some learners' chances of attaining an accommodation.

The researcher's awareness of problems surrounding accommodations extended further to the accommodation assessment report. While the IEB is prescriptive in determining the test battery to be used for an accommodation assessment, the assessment report is not grounded on similar rigorous criteria. It is of concern that a learner's chance of procuring an accommodation may be influenced by the quality of the assessing psychologist's report.

The researcher gained insight into the extent of the field of accommodations when she attended an IEB workshop on accommodations. This workshop was facilitated by a member of the IEB Accommodation Panel, Frances Kerr-Phillips. She communicated that in 2011, 537 IEB candidates for the National Senior Certificate examination had been granted accommodations. (In the IEB the term accommodations is used in preference to special concessions.) This figure equated to 6,4% of the total examination candidates. Updated statistics that were communicated at a workshop facilitated by Robyn Mowatt, Assessment Specialist at the IEB, in 2019 indicate that in 2018, 1058 IEB candidates for the National Senior Certificate examination had been granted accommodations. This figure equates to 8,5% of the total examination candidates.

The researcher guarded against multiple roles, namely that of practitioner against researcher. Therefore, she considered her experiences and perceptions of the accommodation process as supplementary to the initial orientation of the research process. Other than selecting the school sites against her background knowledge (see 4.4.1), as researcher she silenced her own voice although interpretive enquiry cannot be totally separated from the researcher's background (4.3.2). However, in keeping with the phenomenological research strategy of inquiry, the researcher had to distance herself from her own personal biases and preconceptions regarding the participants' experiences and perceptions (Nieuwenhuis 2016b:77-78; Fouche & Schurink 2011:316-317). As stated by McMillan and Schumacher (2010:322), the researcher involved herself in the specific context of the study while maintaining disciplined subjectivity.

1.2.2 The need to conduct research

The core departure for this study was to investigate inclusive practices involving accommodations in South Africa, with particular focus on accommodations within independent high schools.

Inclusion and accommodations have been extensively investigated at an international level. Waldron, in Walther-Thomas and Brownell (2001:177), emphasises that the need for research is driven not because there are universal “best inclusive practices” to be discovered, but rather as a means of increasing the repertoire of strategies that schools and teachers can use to ensure that diverse learning needs are met. Winter and O’Raw (2010) and Hardy (2013) reiterate the need for ongoing research into inclusive education from the similar premise that the findings enable others to consider the risks and protective practices associated with inclusive education in relation to their own context.

While lessons are learned from exposure to international research, South Africa’s unique past and current complex state of education necessitate a distinctive investigation with regard to inclusion (Walton et al. 2009:105-106). The research base of inclusion in South Africa is still emerging and as yet is relatively undeveloped, similar to other African countries (Pather 2019).

With regard to South African research: the researcher accessed the largest library in Africa at the University of South Africa and discovered limited literature on inclusion and accommodations relating to the South African context. Research undertaken by Tesemma (2012) on a critical analysis of law and policy on the education of children experiencing disabilities in South Africa provides relevant background information. Research done by Venter (2012) on the implementation of adaptive methods of assessment, particularly amanuensis, in Gauteng schools is of relevance, and research conducted by Alant and Casey (2005) on assessment concessions for learners with little or no functional speech is informative. Furthermore, research conducted by Wentzel (2016) on primary school teachers’ experiences of providing learning support for learners experiencing mild intellectual disabilities is insightful. In relation to the African continent, South Africa appears to be the leading authority on inclusion and accommodations with Lockhart Walton (2006) —named afterwards as Walton only in

her more than 48 publications— on the forefront. Extensive searches of databases with, among others, *private schools; inclusive education; Africa* as key words, yielded research by Pather (2019), in which moving towards inclusive education in Africa since the Salamanca Statement (UNESCO 1994), is depicted as slow. Although some African countries succeed in taking into account the social model and the contexts of barriers, key challenges such as “tension in the development of policies and practices moving forward”, are evident (Pather 2019:782). International policies that underpin inclusion and accommodations are discussed at 1.2.4. However, as already stated, the need for research is driven not because there are universal best inclusive practices to be discovered, but rather in relation to unique contexts.

The research was further motivated by the fact that very few existing local studies have focused on accommodations and the school psychologist’s possible contribution to inclusion within independent high schools. Research undertaken by Cotterell (2015) on the perspective of parents of learners experiencing learning disabilities regarding the implementation of inclusive education in independent schools in the Western Cape, and research done by Lockhart Walton (2006) on the extent and practice of inclusion in independent schools in South Africa, are of general relevance to inclusion within independent schools, but accommodations and the related involvement of the school psychologist are not focal points of these studies. Alant and Casey (2005) highlight the particular need for more specific research on inclusive accommodations to be conducted. The time lapse between Lockhart Walton’s (2006) research and the current study also underscores the need to conduct research in 2020.

1.2.3 Literature overview and theoretical foundation

The review of literature that constitutes the theoretical framework of this study has been arranged in two sections with related subsections. These sections and subsections are embedded in the bio-ecological model of human development and cognitive neuroscience. Although medical terms used in the study may, at first glance, appear to be related to the medical deficit model or within-child model, the cognitive neuroscience approach articulates with positive psychology and Bronfenbrenner’s bio-ecological model. Regarding the latter, the focus is specifically on the biopsychosocial characteristic of each person which may influence developmental outcomes (Bronfenbrenner & Morris 2006:793-825) and thus not on “labels” such as dyslexia.

Similarly, cognitive neuroscience focuses on human brains that process information in much the same way, rather than focusing on “labels” or deficits (Abadzi 2006:8). The change in paradigm from the medical deficit model to the bio-ecological model is not binary, but in finding the balance between the two (Swart & Pettipher 2019:10). Medical intervention such as medication to control epileptic seizures (Krüger 2019:358) should not be confused with the medical deficit model. Of importance is Engel’s (1980) seminal work that already presented the medical treatment of conditions in the context of a hierarchy of systems, such as organ (the brain), person, family and community (Krüger 2018:375). Cognitive neuroscience’s focus on unifying principles and Bronfenbrenner’s biopsychosocial characteristics of persons which may influence developmental outcomes are reverberated in positive psychology’s positive experiences, strengths and intentional promotion of wellbeing and resilience (Noble & McGrath 2008:119).

Of note in the expositions below is the researcher’s lean towards Swart in Swart and Pettipher (2019). While not negating the contributions of others as cited in this report, the researcher considered Swart an expert in inclusive education including related policies and international collaboration as evident in 63 publications with 2,321 citations. Furthermore, Swart served on the Professional Board for Psychology of the Health Professions Council of South Africa (HPCSA) that is of particular importance to this study. She is a professor in Educational Psychology at a South African university that is ranked among the 2020/2021 top six universities in South Africa (BusinessTech 2020).

Bronfenbrenner’s bio-ecological model is a multidimensional model of human development (Swart & Pettipher 2019:11). It comprises four principal components that are in constant interaction with each other. These include: the proximal process or interactions, person characteristics, contexts and time (Bronfenbrenner & Morris 2006:795).

The proximal process is the core of the model and it encompasses enduring and, over time, increasingly complex forms of interactions and relationships with people, objects and symbols. Characteristics of a person, the context and time fuel and direct the proximal process (Bronfenbrenner & Morris 2006:795; Swart & Pettipher 2019:12).

The second principal component of the bio-ecological model is person characteristics. According to Swart and Pettipher (2019:12-13), the following three types of person characteristic are fundamental in shaping human development:

- Dispositions such as aggression, shyness and curiosity.
- Ecological resources, which amongst others involve genetic defects, physical impairments, skills and experience.
- Demand characteristics such as hyperactivity versus passivity.

Context, as a series of nested systems, is the third identified principle in Bronfenbrenner's bio-ecological model and it too is a determining factor in the course of the proximal process and human development. The following contextual systems have been identified (Bronfenbrenner & Morris 2006:796; Nel 2015:2-5; Swart & Pettipher 2019:14-15):

- The microsystem is the immediate environment in which an individual functions.
- The mesosystem refers to the relationships and connections that exist among two or more microsystems. Mesosystems have relevance in the accommodations process as they include interactions between schools, the parents and in some cases the community.
- The exosystem refers to systems that the individual is not actively part of, but that nevertheless influence development. With regard to accommodations, legislation, policies and parents' work circumstances are influential examples of exosystems.
- The macrosystem refers to the dominant social and economic structures and the attitudes, values and beliefs embedded in the specific society and culture. This has relevance to the accommodation of learners experiencing barriers to learning, as it is envisaged that the philosophies and principles of inclusive education, which includes a moral culture of fairness, tolerance and equality, will guide the accommodation process.

The fourth and final defining property of the bio-ecological model is time or the chronosystem. Time has a prominent place in the micro, meso and macro systems and it relates to the changes and development of interactions between the systems over time and their influences on individual development and growth (Swart & Pettipher 2019:16-17).

Within a South African context, Bronfenbrenner's bio-ecological model has reference to inclusive education and the associated accommodation process. It serves as a reminder of the complexity of the interaction and interdependence of multiple systems that influence a learner's development. It further provides a platform from which risk factors in development can be identified and it establishes a framework from which the identification of relevant protective factors, such as accommodations, may be made (Swart & Pettipher 2019:11-17).

The role of the educational psychologist's fostering of inclusion through accommodation in relation to the bio-ecological model involves mainly the influences of the microsystem and the mesosystem of the learner albeit protective or risk factors (also see 1.2.9). With regard to accommodation and the exosystem of the learner, the educational psychologist should consider legislation, policies and parents' work circumstances among others. The macrosystem which necessitates a moral culture of fairness, tolerance and equality guides the psychologist during the accommodation process. The psychologist's role in engendering emotional support is included in Bronfenbrenner's person characteristics (see 1.2.9).

With regard to barriers to learning, this study included a view of the barriers from a cognitive neuroscience perspective. This involved a study of the neural mechanisms that underpin barriers to learning in reading and writing and specific reference was made to dyslexia and aphasia. The focus on cognitive neuroscience is not, however, limited to diagnosis, which is rather ascribed to neuropsychology. Cognitive neuroscience is the study of the intersection of the biological functions of the brain and the mind; although neuropsychology is closely related to cognitive neuroscience, it studies people experiencing impaired cognitive functioning (Krüger 2018:374) which is not the intention of this study. Cognitive neuroscience (as a subfield of neuroscience) and neuropsychology (as a subfield of cognitive psychology) uncover the relation between the brain and learning and development, typical or impaired (Krüger 2018:375). Cognitive neuroscience's contribution to a broader understanding of the barriers to learning, with a view to developing more comprehensive support plans, was of particular relevance to this study (Cappa 2001:300; Lezak, Howieson, Bigler & Tranel 2012:5). Furthermore, the bio-ecological model of Bronfenbrenner includes brain function under person characteristics (Bronfenbrenner & Morris 2006:795, 810). Note

that the “bio” in the bio-ecological model also makes room for the biological functions of the brain.

The two sections and related subsections of the literature overview are contained in Table 1.1 and discussed below. The study commences with the contextualisation of inclusion and accommodations against the backdrop of international and national legislation and policies, followed by assessments and types of accommodation. Thereafter, reading barriers and written expression barriers are highlighted against the supporting role of the psychologist, usefulness of accommodations and learners’ perceptions of accommodations. Table 1.1 also indicates the breakdown of each of these of these subsections into specific topics.

Table 1.1 Two sections of literature overview

Section 1	
Legislation and policies that underpin international and national inclusion and accommodations	<ul style="list-style-type: none"> - Legislation and policies that underpin inclusion and accommodations in America - Legislation and policies that underpin inclusion and accommodations in Finland - Legislation and policies that underpin inclusion and accommodations in Australia - Legislation and policies that underpin inclusion and accommodations in South Africa - The IEB Policy and Procedures: Accommodations and Exemptions (2018) document
Intellectual and academic assessments for accommodation purposes in independent high schools	<ul style="list-style-type: none"> - Prescribed IEB assessment tools - Limitations of prescribed IEB assessment tools
Types of accommodation	<ul style="list-style-type: none"> - Setting accommodation - Scheduling accommodation - Presentation accommodation - Response accommodation
Section 2	
Barriers to learning in reading that may attract accommodations	<ul style="list-style-type: none"> - Word reading accuracy - Reading rate or fluency - Reading comprehension - Dyslexia - Aphasia
Barriers to learning in written expression that may attract accommodations	<ul style="list-style-type: none"> - Spelling accuracy - Clarity or organisation of written expression - Writing rate
Accommodations	<ul style="list-style-type: none"> - Advantages of the use of accommodations - Challenges of the use of accommodations - Perceptions of learners of how well accommodations

	work
The role of the educational psychologist in supporting learners with accommodations	

1.2.4 Section 1: Legislation and policies that underpin international and national inclusion and accommodations

1.2.4.1 Legislation and policies that underpin inclusion and accommodations in America

In the United States, the Americans with Disabilities Act (ADA) and the ADA Amendments of 2009, Section 504 of the Rehabilitation Act of 1973, the Individuals with Disabilities Education Act (IDEA) of 2006 and the Individuals with Disabilities: Education Improvement Act (IDEIA) define the rights of learners that experience barriers to learning and are important statutes that guide inclusive practices (ADA 1990; United States Department of Education 2006, 2011; United States Department of Education Office for Civil Rights 2010).

The ADA and the ADA Amendments of 2009 form the broad, overarching federal law which provides civil rights protection to all individuals with impairments, and guarantees equal opportunities for individuals with disabilities in America.

Section 504 of the Rehabilitation Act of 1973 is a federal law designed to protect the rights of individuals with disabilities in any programme or activity that receives federal financial assistance. In terms of Section 504 of the Rehabilitation Act of 1973, equal access and fairness in general education is provided for learners with barriers to learning, thereby levelling the playing field for them.

In accordance with Section 504 of the Rehabilitation Act of 1973, a learner who has been identified with a mental or physical impairment that substantially limits one or more major life activities is entitled to an Accommodation Plan. The identification of a disability is determined by the Section 504 Team. A Section 504 Team typically consists of a core group that includes the school principal or administrator, referring and/or general education classroom teacher, school counsellor/psychologist and parents.

The Individuals and Disabilities Education Act (IDEA) is a primary federal law providing funding and policy guidance for the education of learners with disabilities who need special education. A learner who is found eligible under IDEA as a learner with a disability is entitled to appropriate education which is delivered through an Individualised Education Programme (Bakken, Obiakor & Rotatori 2013:1).

1.2.4.2 Legislation and policies that underpin inclusion and accommodations in Finland

In the field of education, Finland is often upheld internationally as a model that facilitates progressive and high-quality schooling. It has an international reputation for education excellence and has a much-lauded education system (Graham & Jahnukainen 2011; Australian Research Alliance for Children and Youth (ARACY) 2013).

Finland's education system has been based on a philosophy of "Education for All" and rather than stagnation, Finland's cultural conservatism has fostered stability and considered decision making in education. The education system in Finland is currently underpinned, at a national level, by the Basic Education Act of 2010 with Amendments and the Strategy on Special Needs Education of 2007 (Graham & Jahnukainen 2011).

Under the Basic Education Act of 2010 a three-tiered model of learner support is provided. This support model allows for: general support, intensified support and special support. According to the Basic Education Act, general support is available to a learner who has temporarily fallen behind in studies, and a learner who needs regular support in learning may be provided with intensified support (Finland 2010). If further support and assistant services are needed, then special support will be considered.

Early intervention and support within the classroom are stressed. Support is based on the observed needs of the learners; formal, specialised assessment and diagnosis is not crucial in defining eligibility for support (Itkonen & Jahnukainen 2010). The benefit of this system is that the learner does not need to "wait to fail" to get additional support (Graham & Jahnukainen 2011).

1.2.4.3 Legislation and policies that underpin inclusion and accommodations in Australia

In Australia, the Disability Discrimination Act of 1992 (DDA) was designed to address discrimination against people with a disability across a number of areas, including education (Commonwealth of Australia 1992). The DDA was extended by the development of the Disabilities Standards for Education 2005 (Davies 2012:66). These overarching legislative policies should ideally facilitate inclusion and discrimination-free educational services for learners with barriers to learning in Australia (Keeffe-Martin 2001:2-10; Zirkel 2009:68-71).

The federated education systems that exist in Australia give rise to variance in inclusive policies and practices between the Australian states and territories, but all jurisdictions must comply with the Disability Discrimination Act of 1992 and the establishment of the Disabilities Standards for Education 2005; inclusion is firmly established in the Australian educational landscape (Davies 2012:70).

A needs-based approach to identifying learners requiring supplementary support, such as accommodations, is in place in Australia and access to additional support is usually associated with identifying categories of need or disability and specifying levels of support required. A parallel system of special schools and classes for learners who experience difficulty in schools and with learning is a feature of the education support. However, in the face of the rapidly growing “special” education population, the School Learning Support Programme is being trialled, which is intended to reduce the reliance on disability classification for support (Davies 2012:70).

Despite the shift away from a reliance on testing to determine eligibility for support, inclusive assessment is still a prominent feature of Australian education. Australian legislation and policies, with specific reference to: A National Assessment Programme for Literacy and Numeracy (NAPLAN), and more recently the Australian Curriculum Assessment and Reporting Authority (ACARA) 2011, promote inclusive assessment for all. Challenges with aspects of inclusive assessment are apparent and Davies (2012:75) cautioned that learners experiencing barriers to learning, who are struggling already, need to be guaranteed a “fair go” with regard to fair participation in assessments.

1.2.4.4 Legislation and policies that underpin inclusion and accommodations in South Africa

The international movement towards inclusion and learner support has not been ignored in South Africa. Inclusive education in South Africa has its origins in a rights perspective and is underpinned by the principles of equality and human rights which form the cornerstones of the Constitution of the Republic of South Africa Act 108 of 1996 (Christie 2008:13; Swart & Pettipher 2019:18).

Swart and Pettipher (2019:18-19) propose that the following policy documents have further guided and shaped inclusive education in South Africa:

- (i) The White Paper on Education and Training in a Democratic South Africa (1995)
- (ii) The UN Convention for the Rights of the Child (UNCRC 1990), ratified by South Africa in 1995 (specifically Article 23)
- (iii) The South African Schools Act 84 of 1996 and amendments
- (iv) The White Paper on an Integrated National Disability Strategy (INDS) (1997)
- (v) The National Commission on Special Educational Needs and Training and The National Committee on Educational Support Services (1997)
- (vi) The Education White Paper 6: Special Needs Education: building an inclusive education and training system (2001)
- (vii) Children's Act 38 of 2005
- (viii) The Draft National Disability Policy Framework and guidelines for the implementation of the National Disabilities Framework (2008)
- (ix) The UN Convention on the Rights of Persons with Disabilities (UNCRPD) (2006), ratified by South Africa in 2007
- (x) The set of Conceptual and Operational Guidelines (2005), including the:
 - National Strategy on Screening, Identification, Assessment and Support (2014)
 - Guidelines for inclusive learning programmes (2010)
 - Conceptual and Operational Guidelines for district-based support teams (2005)
 - Guidelines to ensure quality education and support in special schools and special school resource centres (2007)
 - Guidelines for full-service/inclusive schools (2009)
 - Guidelines for responding to learner diversity in the classroom through curriculum and assessment policy statements (2011)

- (xi) The National Plan of Action for Children (RSA 2012) in South Africa 2012–2017
- (xii) The UN Convention on the Rights of Persons with Disabilities (UNCRPD) (UNESCO 2006), ratified by South Africa in 2007 (specifically Article 24)
- (xiii) Amendments to the policy document, national policy pertaining to the conduct, administration and management of examinations and assessment for the National Senior Certificate (National Education Policy Act, 1996 (Act No. 27 of 1996))

The SIAS (DBE 2014a), coupled with the Department of Basic Education's (DBE's) (2014b) approval of the amendments to the policy document, *National Policy pertaining to the conduct, administration and management of examinations and assessment for the National Senior Certificate*, Government Gazette 37652, has further guided inclusive education and the implementation of accommodations for learners who experience barriers to learning and assessment.

1.2.4.5 The IEB Policy and Procedures: Accommodations and Exemptions (2018) document

According to the Diversity and Equity Policy, independent schools are also committed to an inclusive model of education (ISASA 2002:3). The *IEB Policy and Procedures: Accommodations and Exemptions* document currently provides the specific framework for accommodations in independent high schools. It outlines: the procedural route for an IEB accommodation, the documents and testing requirements for an IEB accommodation application and the barriers to learning for which an IEB accommodation may be granted (IEB 2018).

1.2.4.6 Intellectual and academic assessments for accommodation purposes in independent high schools

1.2.4.7 Prescribed IEB assessment tools

The IEB is prescriptive in the assessment tools that may be used for the purpose of an accommodation application. An intellectual assessment and a battery of prescribed academic tests are required to help determine the need for accommodations that will enable learners experiencing barriers to learning to work to potential. However, in

keeping with Bronfenbrenner's bio-ecological model, whereby the learner as an individual with biological resources and attributes is viewed against the background of his or her interrelated context, the IEB does not determine the need for accommodation allocation on psychometric information alone. Individual background history, samples of schoolwork and teachers' inputs are co-determinants of a learner's need for an accommodation.

The IEB's intellectual assessment battery includes: Wechsler Adult Intelligence Scale–Fourth Edition (WAIS–IV) or the Wechsler Intelligence Scale for Children–Fourth Edition (WISC–IV) or the Wechsler Intelligence Scale for Children–Fifth Edition (WISC–V) or the Senior South African Individual Scale–Revised (SSAIS–R).

The Wechsler Intelligence Scale for Children (WISC–IV) and the updated (WISC–V) are intelligence tests for children between the ages of 6 and 16 inclusive, while the Wechsler Adult Intelligence Scale (WAIS–IV) is an intelligence test for adults from ages 16 to 90. As some learners in independent schools are assessed for the first time when they are 17 years old, it is important that the WAIS–IV be available for use. The WISC–IV and WAIS–IV tests provide composite scores that represent intellectual functioning in specified cognitive areas: (i.e., Verbal Comprehension Index, Perceptual Reasoning Index, Processing Speed Index and Working Memory Index) and a composite score that represents general intellectual ability (i.e., Full Scale IQ) (Wechsler 2008:1). The WISC–V has four levels of interpretation: Full Scale, Primary Index, Ancillary Index and a Complementary Index. At a Primary index scale level, the WISC–V provides scores that represent intellectual functioning in the following cognitive areas: Verbal Comprehension, Visual Spatial, Fluid Reasoning, Working Memory and Processing Speed (Wechsler 2014:20).

The SSAIS–R (1992) is a revised version of the Senior South African Individual Scales (SSAIS) that was published in 1964. It has an age range of 7 years 0 months to 16 years 11 months. It provides a measure of general intelligence and verbal and non-verbal abilities (Van Eeden 1991:3).

1.2.4.8 Limitations of prescribed IEB assessment tools

Psychological assessment in South Africa is controversial due to past indiscriminate, unfair and biased use of tests (Laher & Cockcroft 2014:303). Ethical consideration in assessment needs to be foregrounded and Foxcroft (2011:10) is of the opinion that it is unacceptable and unethical to use Westernised tests without adapting them, re-norming them and establishing local psychometric properties.

The WAIS–IV has recently been adapted for the South African context. The requirements of the South African context demanded that the WAISI–V SA sample included second-language English speakers. This is unique to Wechsler assessment adaptations as they are usually standardised using first-language speakers only. The cultural appropriateness of instructions, verbal test content and the pictures used were taken into consideration and new norms that are applicable to the South African population have been completed (Taylor 2015:1). However, the WISC–IV and WISC–V have not yet been adapted or standardised to the South African context and cognisance is taken of this limitation of these tests.

While the SSAIS–R is of South African origin it too has limitations as a psychometric instrument, as it was only standardised for English- and Afrikaans-speaking white, Coloured and Indian South African children (Laher & Cockcroft 2014:306).

With regard to academic assessments, the IEB's academic assessment battery for reading, written expression and calculations includes tests that measure: sight word reading, pseudoword reading, reading comprehension, written expression, spelling and, where applicable, calculations. The tests are largely international Western tests and, as with the use of Western intellectual tests, the concerns with regard to bias, equivalence and fairness remain.

1.2.5 Types of accommodation

As already stated, there are four major kinds of accommodations. They include: setting accommodations, scheduling accommodations, presentation accommodations and response accommodations.

1.2.5.1 *Setting accommodation*

A setting accommodation is associated with changes in the place in which an assessment occurs and may involve changes in location and/or modifications and adaptations of the test environment (Thurlow, Elliot & Ysseldyke 1998:47). The setting may be modified or adapted to accommodate the learner's specific needs, such as wheelchair access, special lighting and adapted furniture. Learners that are anxious or distracted in a large class or learners who may be receiving accommodations that are distracting to other learners, such as the use of a scribe, may require a setting accommodation (Bolt & Roach 2009:49; Goh 2004:41; Venter 2015a:74).

1.2.5.2 *Scheduling accommodation*

Scheduling is a time-related accommodation. Tests are often set up to be administered at a prespecified time and for a prespecified amount of time. Learners experiencing barriers to learning may need scheduling accommodations in order to coordinate assessment with the effects of medication; others may need adjustments to the scheduling requirements of the assessment if there are times of the day when they cannot perform to full potential, as may be the case with learners who experience chronic fatigue, or learners may need additional time or rest breaks to allow for optimal performance (Bolt & Roach 2009:48, Venter 2015a:63).

According to Goh (2004:43), additional time is the most frequently requested accommodation. Additional time increases the allowable length of time to complete a test or examination, as some learners need more time to demonstrate what they know and what they can do (Bornman & Rose 2011:47; Venter 2015a:64).

In contrast to additional time, rest breaks afford learners experiencing barriers to learning an opportunity to take a break during testing. This may be appropriate for learners whose barrier to learning causes them to experience fatigue and thus perform poorly towards the end of the test (Bolt & Roach 2009:48).

1.2.5.3 Presentation accommodation

Presentation accommodations are changes in how an assessment is given to a learner and involve changing the medium of the test administration (Thurlow et al. 1998:53). Presentation accommodation needs vary according to a learner's specific barrier to learning. Learners experiencing visual impairments may benefit from examination papers being presented in enlarged print (Venter 2015a:70). A blind learner may need the assessment to be presented in Braille, while a deaf learner may need the assessment to be administered in sign language. Learners experiencing significant barriers to learning in reading may require oral reading of the test questions (Goh 2004:42).

1.2.5.4 Response accommodation

Response accommodations are changes in how a learner responds to an assessment. They are used for learners who are unable to respond to the test items in the standardised format and allow a learner an equal opportunity to demonstrate his knowledge by using alternative response forms (Goh 2004:42; Gregg 2011:50; Thurlow et al. 1998:57). For example, learners experiencing significant barriers to learning in handwriting or written expression may be afforded response accommodations allowing them the use of a scribe or computer (Venter 2015a:75).

The following accommodations are available at the Independent Education Board's (IEB's) (2018) discretion: additional time, amanuensis, Braille, computer, enlarged print, handwriting, medication/food intake, practical assistant, prompter, reader, rest breaks, scribe, separate venue, specific equipment and spelling. The IEB will also consider unique cases that are not included in the above-mentioned accommodations. All four of the major accommodations (Bolt & Roach 2009:43) are thus taken into consideration by the Independent Examination Board.

In order to be effective, testing accommodations should be individualised and tailored to meet learners' unique needs. Ideally there should be some consistency between accommodations used during testing and those used in the classroom setting and other school activities (Goh 2004:46-47).

1.2.6 Section 2: Barriers to learning in reading that may attract accommodations

Barriers to learning in reading, which underpin many applications for accommodations, were investigated. Terminology associated with barriers to learning varies considerably. The literature refers to learning disabilities. The *IEB Policy and Procedures: Accommodations and Exemptions* document refers to specific learning difficulties (IEB 2018), while the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (APA 2013), which is an internationally used medical manual, refers to specific learning disorders. These terms have links with the medical deficit model which is primarily a model of diagnosis and treatment (Swart & Pettipher 2019:5-6). Despite the medical bias of these terms, the shift to a more integrated approach, that is in keeping with the bio-ecological model, is evident in the *IEB Policy and Procedures: Accommodations and Exemptions* document (IEB 2018) and the DSM-5 (APA 2013), as both call for a wide array of integrated data to be used to confirm specific learning disorders.

1.2.6.1 Word reading accuracy

Word reading accuracy is underpinned by the development of the reading sub-skills; word recognition by sight and word recognition by decoding. Word recognition by sight or sight words are words that have been stored in memory and can be recognised instantly. Word recognition by decoding occurs when a learner is able to decode word by pronouncing them part by part by relating letters to sounds (Gillet, Temple, Temple & Crawford 2012:95; Lombardino 2012:42-53).

In keeping with the cognitive neuroscience perspective of this study, an overview of the neural networks involved in the reading process formed part of the study. There are four major participating areas of the brain involved in the reading process, as depicted in Figure 1.2. According to Denton, Fletcher, Simons, Papanicolaou and Anthony (2007:127) and Lombardino (2012:24), the Broca's area is responsible for phonological processing involving phonological encoding and phonological memory, and it is also involved in articulation mapping, as in the pronunciation of words. Wernicke's area is responsible for phonological processing involving letter-sound correspondences or phonological mapping. The angular gyrus is likened to a relay station that links information across modalities. The fourth area, the visual association cortex in the occipito-temporal region, is responsible for word form recognition or graphemic analysis.

Barriers to learning in the area of word reading accuracy may compromise a learner's performance, and depending on the severity of the barrier, a presentation accommodation such as a reader, who orally reads the test questions, may be necessary. Ideally the reader reads clearly and slowly, in order for the learner to follow on his question paper (Goh 2004:42; Venter 2015a:65).

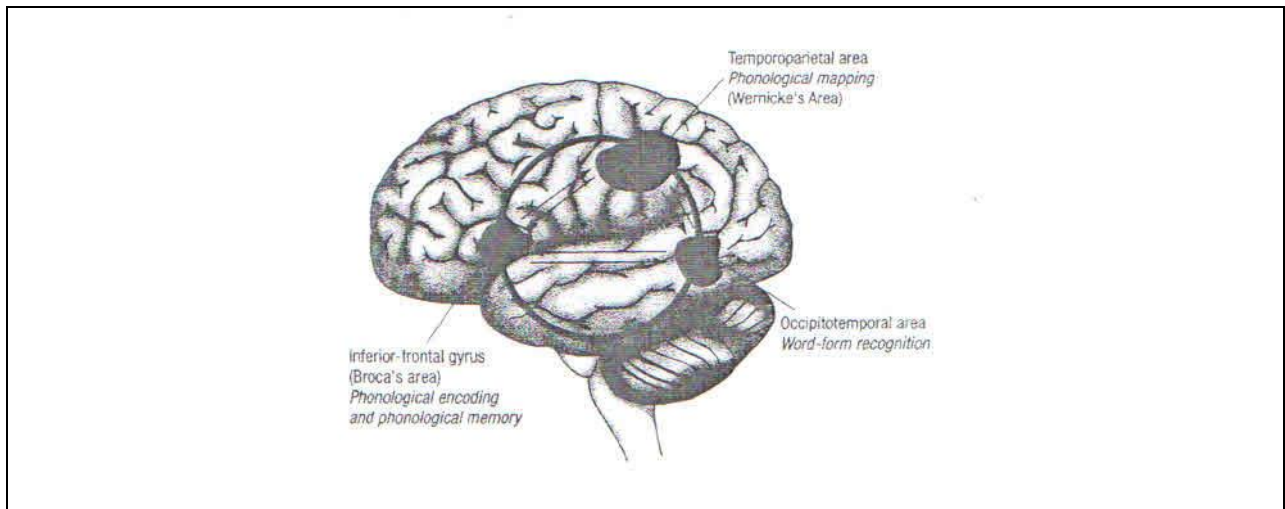


Figure 1.2 Simple schematic of reading areas in the brain

Source: Lombardino (2012:24)

1.2.6.2 Reading rate or fluency

Smooth and accurate word recognition, together with meaningful articulation and expression, forms the basis of reading fluency. Once learners have built fluency in reading and the mechanical operations of reading have become automatic, then their full attention can be focused on reading for meaning (Gillet et al. 2012:99; Lombardino 2012:47).

Learners that read competently, but slowly may benefit from an accommodation allowing them additional time, while learners experiencing more significant barriers in reading rate and fluency may be considered for a presentation accommodation allowing them the use of a reader (Venter 2015a:65).

1.2.6.3 Reading comprehension

Reading comprehension is multifaceted; while fluency forms the bridge to reading comprehension it does not end there. Reading comprehension involves word recognition, vocabulary, listening comprehension and cognition such as reasoning and memory, along with world knowledge (Lombardino 2012:42-53).

Reading comprehension forms part of the prescribed IEB academic test battery and results from this assessment help to determine whether a learner requires an accommodation in this area of learning.

1.2.3.4 Dyslexia

Although the DSM-5 (APA 2013) no longer classifies dyslexia as a separate diagnosis, as it is housed under the diagnosis of a specific learning disorder with added specifiers (Snowling, Hulme & Nation 2020:503), dyslexia will form a discrete part of this study. Dyslexia is specifically itemised in the *IEB Policy and Procedures: Accommodations and Exemptions* document as a criterion for accommodations and the prevalence of dyslexia in learners further motivated its inclusion in the study (IEB 2018). Wadlington and Wadlington in Thompson (2013:26) propose that the average number of learners experiencing dyslexia universally is between 10 and 15% of the population.

The International Dyslexia Association defines dyslexia as a specific learning disability characterised by unexpected difficulties in accuracy and rate of decoding, word reading and text reading and spelling (Berninger & O'Donnell 2005:192). Fletcher and Lyon (2008) in Lombardino (2012:142) hold that dyslexia results from an interaction of neurobiological factors that make the brain at risk, but they acknowledge that environmental factors moderate the risk.

Different types of dyslexia have been identified and for the purpose of this study dysideitic dyslexia, dysphonetic dyslexia, and dysphoneidetic dyslexia were investigated. According to Sutton (2011:138-14) and Reid (2003:109-110):

- Dyseidetic dyslexia is characterised by difficulties in the revisualisation and recall of the gestalt of words.

- Dysphonetic dyslexia is associated with auditory processing problems. Learners typically have difficulties remembering letter sounds, analysing the individual sounds into words and sequencing/blending these into words.
- Dysphoneidetic dyslexia occurs when a learner cannot read and spell words because of combined difficulties with the recall of the sight word and an inability to break phonetically regular words into their sound parts.

1.2.6.5 Aphasia

With regard to barriers to learning, the *IEB Policy and Procedures: Accommodations and Exemptions* document lists aphasia as a criterion for specific accommodations and, with this in mind, aphasia was included in the study (IEB 2018).

Aphasia is of neurological origin and refers to full or partial loss of verbal communication skills as a result of damage or degeneration to portions of the brain that are responsible for language. This difficulty fully (i.e., aphasia) or partially (i.e., dysphasia) impairs verbal expression and comprehension of language which, in turn, affects reading and writing. The two broad categories of aphasia include: fluent or receptive aphasia, which is also known as Wernicke's aphasia, and non-fluent or expressive dysphasia, which may also be termed Broca's aphasia (Kellogg 2003:282-285; Lezak et al. 2012:33; Lombardino 2012:24; Sutton 2011:122; Ward 2015:276-280).

1.2.7 Barriers to learning in written expression that may attract accommodations

With regard to barriers to learning in written expression, in concurrence with the DSM-5 (APA 2013:66-67), deficits in spelling accuracy and clarity or organisation of written expression were investigated.

1.2.7.1 Spelling accuracy

At the simplest level, spelling is the association of alphabetic symbols called graphemes with speech sounds called phonemes (Montgomery 2007:7). An ability to visualise the appearance of word, retrieve the word from memory and then apply graphomotor skills to write the word are additional elements involved in the spelling process (Bender 2001:189; Venter 2015b:44).

A spelling accommodation is considered when the learner's ability to express thoughts is impeded by poor spelling and when there is significant discrepancy between the chronological age and spelling age of a learner.

1.2.7.2 Clarity or organisation of written expression

Barriers to learning in written expressions are multifaceted and while they may include difficulties with handwriting and sentence construction, the barriers are often more deep-seated (Venter 2015b:50).

Bender (2001:189) is of the opinion that difficulties with spoken language may impede written expression. However, some learners experiencing barriers to learning in the area of written expression have good verbal expressive skills but struggled to organise and commit their thoughts to paper.

Depending on the individual profile of the learner, a response accommodation may be appropriate for learners experiencing barriers to learning in written expression which would allow the learner the use of a scribe or a computer.

1.2.7.3 Writing rate

Handwriting is primarily a motor activity that needs to be taught. It is not a natural skill that will develop like walking. According to Alston and Taylor (1993) in Montgomery (2007:37), 10% or more of learners have mild handwriting coordination difficulties and find it difficult to form letters correctly at a reasonable speed.

With regard to cognitive neuroscience underpinning handwriting and writing rate, the voluntary motor cortex in the cerebral hemispheres is responsible for learning handwriting skills and putting all the parts together. While the motor skill of handwriting is being learned, the cerebellum (hind brain) is shadowing the skill acquisition process and begins to take over control of the operation, which frees up the main brain (Montgomery 2007:36-37).

As barriers to learning in the area of handwriting may impede a learner's performance, the use of a response accommodation may be applicable. This could take the form of a handwriting sticker, which ensures that the assigned marker is skilled in deciphering untidy writing, or the use of a scribe or computer.

1.2.8 Accommodations

1.2.8.1 Advantages of the use of accommodations

- An overarching advantage of accommodations is that they allow learners who experience barriers to learning the opportunity to work optimally. This is significant, as the true abilities of learners experiencing barriers to learning are often shrouded beneath the difficulties that they experience. Ideally, there should be consistency between accommodations used during testing and those used in general teaching and learning. However, application of testing accommodations into the general teaching and learning arena is a complex issue and it does not always occur (Goh 2004:28-33).
- An advantage that is central to accommodations is that they may serve as a protective factor for learners experiencing barriers to learning and, in turn, may prove to be important elements in the development of a learner's resilience (Swart & Pettipher 2019:11). A protective factor is an individual or environmental resource that helps to buffer a learner against adversity and minimises the impact of risks (Noble & McGrath 2008:120-121).
- Further to accommodations serving as a protective factor for learners experiencing barriers to learning, information gleaned from the assessments that underpin an accommodation application may also serve to be useful in determining learning styles and study skills that are specifically suited to an individual learner. Acquisition and implementation of appropriate learning styles and study skills may serve as an important protective factor and determinant of successful learning (Reid 2003:209).

1.2.8.2 Challenges of the use of accommodations

- A general lack of understanding about accommodations may present as a challenge. It is important that learners and staff understand the reason why accommodations were recommended, as well as the procedures pertaining to the implementation of

accommodation. Basic training and familiarisation of guidelines aligned with specific accommodations are necessary for learners and staff (Gregg 2011:59; Venter 2015c:92).

- The “fairness” of accommodations and consistency in allocation of accommodations is a further challenge in the accommodations process (Goh 2004:39). Fairness implies not only an intention to give learners experiencing barriers to learning a fair opportunity to participate, but is also underscored by the general aim that accommodations do not give a learner an undue advantage which would result in an incorrect and unrealistic assessment of performance or ability (Bolt & Roach 2009:49; Burns 1998:31). In independent schools the practice of granting accommodations is currently governed by the IEB and their Accommodations Panel. While this ensures a fair degree of consistency, variations still occur.
- With further regard to the considerable challenges associated with accommodations, parental involvement and the quality of the psychologist’s report are of concern, as these factors may have an impact on the accommodation’s application process. Excessive parental pressure to gain accommodations for their children or the absence of parental input may enhance or jeopardise a learner’s chance of procuring an accommodation. Similarly, the quality of the assessing psychologist’s report may influence the outcome of the accommodation’s application.
- The cost involved in attaining an IEB accommodation presents as a further challenge related to the accommodations process. The IEB charge an application fee for accommodations. Furthermore, with the exception of an accommodation that is medically grounded, a recent psycho-educational assessment is a part requirement of an accommodation’s application. Where a psycho-educational report is required, the onus is on the parents and/or school to meet the costs of a professional report that attests to the learner’s barriers to learning (Lockhart Walton 2006:102). It is of concern that the considerable monetary costs associated with an IEB accommodation may be construed as elitist and exclusionary. It is noteworthy that at some independent schools the assessment is conducted by the psychologist at school, while in other independent schools the learner may be referred to a psychologist in private practice for the necessary assessment.
- A common practical challenge associated with accommodations is the shortage of staff and venues that are required to implement the accommodations. This is especially apparent in schools where several learners procure accommodations.

- Within public schools it is the responsibility of the School Assessment Team (SAT) with the aid of the School-Based Support Team (SBST) to make the necessary arrangements for the implementation of accommodations (Venter 2015c:94-95).
- At independent schools, the responsibility for implementing accommodations varies from school to school. The practical implementation of the accommodations at independent schools may be overseen by the educational psychologist, but in some instances, the Learning Support Teacher or Head of Department or School Principal is instrumental in the implementation of accommodations. Parents also sometimes have a role to play in the implementation process in that they may be required to source and reimburse additional staff (e.g., scribe) required for their child's accommodation.

1.2.8.3 Perceptions of learners of how well accommodations work

The learner's perception of how well accommodations work will be influenced by the proximal processes that occur. Proximal processes are forms of enduring interactions that involve reciprocal relationships and interactions between the learner and person's objects and symbols in the immediate environment (Swart & Pettipher 2019:12). The interactions between the school and parents and between the school and the learner and the parents and the learner will influence the learner's perception of accommodations.

However, it is noted that from the bio-ecological perspective, the proximal processes will not be the sole determinants of a learner's perception of accommodations, as personal characteristics and contexts will also be contributing factors in this area of perception.

The powerful role that personal characteristics have in shaping perceptions is central to the fundamental principles of the Positive Psychology model. In the Positive Psychology model, the focus has shifted from deficits, problems and treatment to a preventative focus on positive experiences, strengths and the intentional promotion of wellbeing and resilience (Noble & McGrath 2008:119). In accordance with the Positive Psychology model, learners are not viewed as passive vessels responding to stimuli; but rather as

individuals who have the choice and ability to become masterful (Seligman & Csikszentmihalyi 2000:5-14).

In accordance with the Positive Psychology model, personal traits or disposition may act as an initial protective or risk factor that will influence how learners react to a situation such as the acquisition of an accommodation. However, in accordance with the Positive Psychology model, individual personal traits are dynamic. Thus, optimistic thinking, acting with courage, using humour appropriately and helpful/positive thinking can be honed and developed into resilience skills (McGrath & Noble 2011:10; Noble & McGrath 2008:123; Patterson & Joseph 2007:117-139).

1.2.9 The role of the educational psychologist in supporting learners with accommodations

Support for the learner needs to be viewed within the broad environmental and personal contextual aspects of the learner, and it is important that the educational psychologist takes into account the broad bio-ecological context of the learner and tailors support to meet the individual's needs (Prinsloo 2012:35). The bio-ecological theory illuminates the complexity of the interaction and interdependence of multiple systems that impact on learners and, in turn, influences their support needs. An understanding of the systems will help the educational psychologist to identify protective factors that are relevant and will contribute to the learner's development and resilience (Swart & Pettipher 2019:11-12).

In accordance with the bio-ecological theory, the educational psychologist's support for the learner with accommodations will be tempered by the influences of the microsystem and the mesosystem of the learner.

The microsystem, which encompasses interactions in the immediate environment, may serve as a protective factor for a learner who experience barriers to learning as interactions if the learner's diversity is embraced. However, at times, the microsystem can also be a risk factor, whereby learners are undermined by their immediate environment and primary relationships. Difficulties such as homelessness, drug abuse, child-headed households and family violence constitute examples of microsystems that

are risk factors and may require supportive interventions from the educational psychologist (Nel 2015:5).

Similarly, the mesosystem, which is the relationship that develops between two or more microsystems, may serve as a risk or protective factor for the learner. This has relevance to the role of the educational psychologist in supporting a learner experiencing barriers to learning, as the procurement and implementation of accommodations is underpinned by relationships between the school, the learner and parents.

When a proactive relationship exists between the parents, learners and the school, including the educational psychologist, it is more likely that accommodations, which are a significant protective factor, will be procured and implemented timeously (Nel 2015:4). The educational psychologist's relationship with the parents, learners and school is also an important determinant of the acceptance of accommodations. If the educational psychologist is knowledgeable and positive about the accommodations process for learners experiencing barriers to learning, this influence may filter through not only to the learners, but may also be experienced by school and staff members, the school principal, the parents and at times the wider community (Venter 2012:34).

The educational psychologist's role in engendering emotional support, through the promotion of a learner's self-determination, was also considered. Self-determination encompasses the need for competence, belongingness and autonomy (Smith, Polloway, Patton & Dowdy 2006:185; Wehmeyer & Field 2007:3). According to Field and Hoffman (1994) in Bauer and Shea (2003:210), self-determination is a foundational component of inclusion and involves the ability to define and reach goals based on the foundation of knowing and valuing oneself. The greater the self-determination and associated autonomy of a learner's behaviour, the more likely the learner is to persist in the face of risks and obstacles (Ryan, William, Patrick & Deci 2009:112).

1.3 DELIMITATION OF RESEARCH FIELD

This study was delimited to independent high schools.

The sample participants included learners who, through their initial application, procured an IEB accommodation or IEB accommodations and were in Grades 9 to 11. The focus of the accommodations relates to word reading accuracy, reading rate or fluency, reading comprehension, dyslexia, aphasia, spelling accuracy, clarity or organisation of written expression and writing rate. The learners were adolescents and it is noted that this is a vulnerable and self-conscious period of development. The learner's mother tongue might vary, but their language of instruction in both primary and high school was English. Both male and female learners were included in the sample. The school principals at the elected school sites were responsible for the selection of learner participants.

With regard to the learner's accommodations, the four major accommodations outlined in Bolt and Roach (2009:43) formed part of the sample. Thus, accommodations in: setting, scheduling, presentation and response were included in the sample.

The sample participants also included educational psychologists that were actively involved with the accommodation application process, implementation of accommodations and associated support of the learners. The educational psychologists had exposure to inclusive education within their independent high school and they were qualified and registered as psychologists.

1.4 STATEMENT OF THE RESEARCH PROBLEM

How can the educational psychologist promote the development of inclusive education through accommodations in South African independent high schools?

1.5 AIM AND OBJECTIVES OF THE STUDY

The primary aim of the study is stated at 1.5.1 though the promotion of the development of inclusive education by the educational psychologist through the use of accommodations in South African independent high schools is followed by objectives comprising research sub-questions (1.5.2.1) and means to explore these questions (1.5.2.2). These means covered literature reviews regarding legislation and policies that underpin inclusion and accommodations as well as accommodations for reading and

written expression barriers (see 1.8). All of the above contributed to the research conclusions at 6.4.

1.5.1 Primary aim

The primary aim of the study was to promote the development of inclusive education by the educational psychologist through the use of accommodations in South African independent high schools.

1.5.2 Objectives

1.5.2.1 Research sub-questions

In the light of the primary aim to determine and explore ways in which an educational psychologist can promote inclusive education through the use of accommodations within independent South African high schools, the research questions were formulated as follows:

- What policies underpin inclusion and accommodations in independent high schools?
- What is the nature of accommodations available to independent high school learners?
- What are the educational psychologist's perceptions of the use of accommodations in independent high schools in general?
- What support may the educational psychologist provide to learners who require accommodations?
- What are the learner's perceptions of the use of accommodations in independent high schools?

1.5.2.2 Research objectives in exploring sub-research questions

The research questions were explored by means of:

- Literature reviews
- Semi-structured individual interviews
- Participant observation

- Research diary

1.6 CONCEPTUAL FRAMEWORK: SCOPE, OPERATIONAL DEFINITIONS AND SIGNIFICANCE OF STUDY

The preceding sections and sub-sections provide the backdrop for the scope of the study in conceptualising the relationships between the components of this study. Thereafter, the operational definitions of key terms flow from the scope to lastly culminate in the significance of the study.

The scope of the study covered IEB accommodations as part of inclusion by the educational psychologist for learners in Grades 9 to 11 experiencing barriers to word reading accuracy, reading rate or fluency, reading comprehension, dyslexia, aphasia, spelling accuracy, clarity or organisation of written expression and writing rate. These barriers to learning in reading and written expression, coupled with cognitive neuroscience that underpins many IEB accommodations, were framed by Bronfenbrenner's bio-ecological model that considers barriers to learning as a potential combination of intrinsic and extrinsic factors regarding micro-, meso-, exo-, macro- and chronosystems. Thus, the following operational definitions are applicable to this study.

1.6.1 Inclusion

According to the Education White Paper 6 (Department of Education 2001:17), inclusion is about supporting all learners, educators and the education system as a whole so that the full range of learning needs can be met.

1.6.2 Barriers to learning

The SIAS (DBE 2014a:12-13) outlines barriers to learning as difficulties that arise within the education system as a whole, the learning site and/or within the learner which prevent access to learning and development for learners. These barriers may include:

- Socio-economic aspects (factors that place learners at risk; for example, physical, emotional and sexual abuse, political violence, HIV and AIDS and other chronic health conditions)

- Attitudes
- Inflexible curriculum implementation at school
- Language and communication
- Inaccessible and unsafe structural environments
- Inappropriate and inadequate provision of support services
- Lack of parental recognition and involvement
- Disability
- Lack of human resources development strategies
- Unavailability of accessible learning and teaching support materials and assistive technology.

1.6.3 Accommodations' function

Accommodations allow learners experiencing barriers to learning an equal opportunity to perform on assessments.

Bolt and Roach (2009:43) propose that accommodations:

- Facilitate effective presentation of test items
- Allow learners to effectively respond to test items
- Allow learners to participate according to a schedule/timing that will help them best demonstrate their knowledge and skills
- Facilitate participation in a setting that is conducive to learning and demonstration of knowledge and skills.

Shaywitz and Shaywitz (2020:314) concur with Bolt and Roach and view accommodations for dyslexia as a bridge that connects learners to their strengths in reaching their full potential. Accommodations act as catalyst to achieve success.

According to the *IEB Policy and Procedures: Accommodations and Exemptions* document the following accommodations can be granted: additional time, amanuensis, Braille, computer, enlarged print, handwriting, medication/food intake, practical assistant, prompter, reader, rephrased examination papers, rest breaks, scribe,

separate venue, specific equipment, spelling and other (non-specified) accommodations (IEB 2018).

1.6.4 Independent schools

The South African Schools Act 84 of 1996 (South Africa 1996b) recognises two categories of schools: public and independent. Public schools are state controlled and independent schools are privately funded and governed. Independent schools' right to exist is further confirmed in Section 29 of the Constitution of the Republic of South Africa Act 108 of 1996 (South Africa 1996a) provided they register with the state, do not discriminate on the basis of race and maintain standards not inferior to those of comparable public institutions.

According to the Diversity and Equity Policy, the ISASA (2002) believes that inclusivity of learners with special educational needs, wherever feasible educationally, should be encouraged.

1.6.5 Cognitive neuroscience

Cognitive neuroscience aims to provide a brain-based account of cognition and so, according to Ward (2015), neuroscience must necessarily speak to some aspect of brain function. Cognitive neuroscience has been driven by methodological advances that enable the study of human brain safely in laboratories (Ward 2015:2).

1.6.6 Educational psychologist

Within a South African context, an educational psychologist is required to have: completed a Masters' degree programme in psychology, successfully completed a full-time approved internship of 12 months' duration and successfully completed the National Examination of the Professional Board for Psychology. Thereafter, in keeping with all individuals who practise any of the health care professions, the educational psychologist is obliged to register with the HPCSA (Health Professions Council of South Africa 2018:1).

With regard to the educational psychologists' promotion of inclusion through the use of accommodations, it is particularly relevant that their scope of practice, according to the Health Professions Act, 1974 (Act No. 56 of 1974), encompasses: identifying and diagnosing barriers to learning and development; applying psychological interventions to enhance, promote and facilitate optimal learning and development; performing therapeutic interventions in relation to learning and development and referring clients to appropriate professional for further assessments or interventions (Department of Health 2011).

It is noteworthy that the term school psychologist is frequently used in literature, including acclaimed researchers in South African peer-reviewed, accredited literature (Moolla & Lazarus, 2014). The term "school psychologist" refers to a psychologist in an educational setting, which is similar to the South African category of educational psychologist.

1.6.7 Perception

The study investigated the participants' beliefs which are socially constructed by experiences and perceptions (McMillan & Schumacher 2010:320-321). Phenomenology is a methodological framework that aims to understand and explain the life world of specific populations as it is developed and consciously experienced by them. Thus, it focuses on a context specific phenomenon, experiences and perceptions and what elements specifically give form and meaning to it (Fouche & Schurink 2011:308).

The significance of the study is being alluded to in 1.2.2 (The need to conduct research). Chapters 5 and 6 illustrate in detail how IEB accommodations by the educational psychologist for learners in Grades 9 to 11 experiencing barriers to learning in reading and written expression —framed by Bronfenbrenner's bio-ecological model— contributed to the body of knowledge regarding South African independent schools and inclusive education practices. The study engenders greater awareness of the educational psychologist's potential to embrace and foster inclusion by means of IEB accommodations through the lens of Bronfenbrenner's bio-ecological model taking into account intrinsic and extrinsic factors regarding various systems. The study also provides avenues for future research.

1.7 RESEARCH DESIGN

The research was conducted using qualitative procedures. The process of qualitative research is emergent in design. The researcher does not begin with a theory to test or verify, but rather establishes patterns or themes (Creswell & Poth 2018:8).

For this study, purposeful sampling was used to determine the learner participants in the study. In purposeful sampling it is hoped that that key participants will yield maximum information related to specific issues (Strydom & Delpont 2011:390-392).

The learners' sample comprised twelve learners that had secured accommodations in one or more of the following areas: setting, scheduling, presentation or response and were in Grades 9 to 11 at independent high schools. Male and female learners whose language of instruction in both primary and high school had been English were selected.

The sample participants also included six educational psychologists that were involved with the accommodation application process, implementation of accommodations and associated support of the learners in independent high schools.

Interactive and non-interactive data collection strategies were used to obtain qualitative data for this study. Interactive semi-structured interviews were used in order to gain a detailed picture of the learners' and educational psychologists' participants beliefs about, or perceptions or accounts of, accommodations and support (Greef 2011:351). Furthermore, the semi-structured interviews served to gain insight into the nature of learning support that the educational psychologists implement for learners with varying accommodation and individual needs. Non-interactive data collection strategies were employed through judicious observations.

The data received is presented in the narrative form and applicable tables used.

1.7.1 Ethical considerations

Researchers are ethically obliged to consider and respect the rights of individuals involved in the study. To this end the research objectives were clearly discussed with the participants and written permission, consent and assent were procured after ethical

clearance was obtained at the University of South Africa. Anonymity of participants and confidentiality were upheld and research findings made available to those involved in the study.

1.8 RESEARCH PLAN

The research report consists of six chapters:

- Chapter 1: Introduction orientation, statement of the problem, aim of the study and clarification of concepts
- Chapter 2: Literature review of legislation and policies that underpin inclusion and accommodations
- Chapter 3: Accommodations for reading and written expression barriers
- Chapter 4: Research design and methods
- Chapter 5: Data analysis and interpretation
- Chapter 6: Summary, conclusions and recommendations

1.9 CONCLUSION

Inclusion is a global movement that embraces diversity. According to the ISASA's (2002:2) Diversity and Equity Policy, independent schools are committed to an inclusive model of education and, as such, need to be proactive in their move towards an inclusive paradigm.

According to Ainscow (1999) in Fielding Barnsley (2005:8), successful inclusion requires a wide array of school-based accommodations and modifications to succeed. Accommodations in: setting, scheduling, presentation and response enable learners experiencing barriers to learning to access the general curriculum and perform optimally in examinations; thus, accommodations constitute an important avenue and structured means of achieving inclusive education (Sutton 2011:480).

Whilst inclusion is given shape and direction by legislation, policies and structures such as accommodations, individuals are powerful determinants of the extent to which inclusive practices are upheld. To this end, educational psychologists have an important

role to play in the facilitation of inclusion. They cannot afford to be uninterested or disengaged with the development and implementation of processes that support the greater goal of inclusive education.

If educational psychologists respond to learners experiencing barriers to learning who have procured accommodations within the framework of inclusive practices, the effects may be far reaching. Sapon-Shevin (2007:228) refers to Margaret Mead's quote as a means of illustrating that individuals can be important instruments of change.

“Never doubt that a small group of thoughtful, committed citizens can change
the world. Indeed, it's the only thing that ever has.”

Margaret Mead (1901-1978)

CHAPTER 2

LITERATURE REVIEW OF LEGISLATION AND POLICIES THAT UNDERPIN INCLUSION AND ACCOMMODATIONS

2.1 INTRODUCTION

Inclusion is a dynamic, evolving process. While important fundamental inclusive goals are to achieve equity and open the doors of education to learners experiencing barriers to learning, a priority that has subsequently emerged is improving the quality and educational outcomes of inclusive education (Bakken et al. 2013:23; Christie 2008:149). Accommodations may prove to be important agents in the quest for improved educational outcomes within an inclusive setting.

The definition of inclusion from the United Nations and its agency UNESCO (2012) embodies the development and refinement of inclusive goals.

Education is not simply about making schools available for those who are already able to access them. It is about being proactive in identifying the barriers and obstacles learners encounter in attempting to access opportunities for quality education, as well as removing those barriers and obstacles that lead to exclusion.

One of the key elements of inclusive education is reasonable accommodation, which is defined in Article 2 of the Convention on the Rights of Persons with Disabilities (CRPD) (UNESCO 2006:4) as “necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms.” It has already been indicated in 1.2.3.1 (iv) that the CRPD was ratified by South Africa in 2007.

Inclusion is highly context-dependent. In each country a range of political and educational agendas have given rise to specific legislation and policies that guide and shape their progress in the inclusive process. From a South African perspective, it is noted that the country’s history and the diversity within South African society have

resulted in a unique approach to inclusion and accommodations (Swart & Pettipher 2019:23). However, despite contextual variance, South African inclusive education, including accommodations, has not developed in a vacuum and cannot be studied without consideration of international legislation and policies (Swart & Pettipher 2019:18-19). To this end, the legislation and policies that underpin inclusion and accommodations in leading countries: America, Finland and Australia are considered in Chapter 2 as South Africa on the African continent appears to be the leading authority on inclusion and accommodations (see 1.2.2). Critical engagement regarding the legislation and policies that underpin inclusion and accommodations in these leading countries is evident in Chapter 6 at 6.2, 6.3.1 and 6.5.2.

With regard to legislation and policies, while the implementation of inclusive education in South African public schools is governed by the framework provided by national legislation and national educational policies, independent schools pursuing inclusion do so apart from state mandate or resources (Lockhart Walton 2006:1). Many independent schools have, however, adopted inclusive principles based on the overarching national legislation and education policies. Independent schools which are members of the ISASA are further guided towards inclusive practices by the Diversity and Equity Policy of this association (ISASA 2002). This policy encourages “inclusivity of learners with special needs, wherever feasible educationally” (Lockhart Walton 2006:53). Against the framework of the Diversity and Equity Policy, the *IEB Policy and Procedures: Accommodations and Exemptions* document has been formalised with the express intention of guiding the accommodation process in independent schools (IEB 2018; ISASA 2002). As a specific focus of this study is the promotion of inclusion through the use of accommodations in independent high schools, the *IEB Policy and Procedures: Accommodations and Exemptions* document will be explored in Chapter 2. Table 3.1 summarises the school psychologists’ assessment procedures as required by the *IEB Policy and Procedures: Accommodations and Exemptions* in providing accommodations and support regarding the barriers to learning that are central to this study (IEB 2018).

School psychologists have an important role to play in the promotion of inclusion through the use of accommodations and an understanding of both international and national legislation and policies. The *IEB Policy and Procedures: Accommodations and Exemptions* is important, as this knowledge will provide the framework and guiding principles upon which their supportive inclusive intervention strategies may be founded

(IEB 2028). Furthermore, keeping abreast of both international and national trends in inclusive education and accommodations will help to ensure that the inclusive movement in education becomes a reality and is not relegated to “ideological bandwagon” rhetoric (Bakken et al. 2013:23; Graham & Jahnukainen 2011).

2.2 LEGISLATION AND POLICIES THAT UNDERPIN INTERNATIONAL AND NATIONAL INCLUSION AND ACCOMMODATIONS

There is a global trend towards inclusive education, and international legislation and policies have become fundamental drivers and definers of inclusive education. Legislation and policies are similar in nature, but they have distinct differences. Legislation refers to statutory laws that have been enacted by a legislature or the governing body of a country. After the primary legislation is approved, it is known as an Act of Parliament. A policy, on the other hand is not a law, but rather an informal document that outlines a set of methods and principles that will be used to reach certain objectives or goals (Waite 2002).

While several varieties of inclusion exist in different international educational contexts, there are a few fundamental commonalities that run across all varieties of inclusion. A broad common principle is dedication to building a more democratic society with an equitable education system that embraces learners with diverse needs (Swart & Pettipher 2019:4). According to Ainscow (2009), Artiles and Kozlwaki (2007) in Swart and Pettipher (2019:4), this central tenant of inclusion is based on a value system that invites and celebrates difference arising from gender, nationality, socio-educational background, cultural origin and level of educational achievement. A further overarching common point of inclusion is that inclusion is a process and not a forced concept. The process demands steadfast collaborative commitment to the embracement of realistic inclusive practices (Lockhart Walton 2006:17).

It is noteworthy that while inclusive education, including accommodations, in South Africa may be shaped by trends and lessons learned abroad, South Africa’s unique past and complex current educational milieu continues to cast an individual slant on inclusive practices within the country (Lockhart Walton 2006:16). Furthermore, according to Swart and Pettipher (2019:23), while the diversity within South African society adds to

the complexity of inclusion, it also creates an opportunity for developing a unique inclusive education system that is not merely an adaptation of any existing one.

2.2.1 Legislation and policies that underpin inclusion and accommodations in America

In America, the Americans with Disabilities Act (ADA) and the ADA Amendments (2009) of Section 504 of the Rehabilitation Act of 1973 the Individuals with Disabilities Education Act (IDEA) of 2006 and thereafter the Individuals with Disabilities Education Improvement Act (IDEIA) of 2011 are the fundamental statutes that guide inclusive practices (Guidelines for Educators and Administrators for Implementing Section 504 of the Rehabilitation Act of 1973) (ADA 1990; United States Department of Education Office for Civil Rights 2010; United States Department of Education 2006; 2011).

2.2.1.1 Americans with Disabilities Act (ADA)

The ADA and the ADA Amendments is the most comprehensive of the nation's disabilities laws (ADA 2009). It is an overarching federal law which provides civil rights protection to all individuals with disabilities. It provides a clear mandate for the elimination of discrimination against such people (Guidelines for Educators and Administrators for Implementing Section 504 of the Rehabilitation Act of 1973) (United States Department of Education Office for Civil Rights 2010:3).

2.2.1.2 Section 504 of the Rehabilitation Act (1973)

Section 504 of the Rehabilitation Act of 1973 is a federal civil rights law which protects the rights of individuals with disabilities in any programme or activity that receives federal financial assistance. Section 504 covers protection of the rights of an individual with disabilities for the duration of a lifespan and aims to safeguard the rights of persons with disabilities in many areas of their lives including: employment, public access to buildings, transportation and education. With regard to education, Section 504 facilitates the provision of equal access and fairness in general education to learners with disabilities (Andrew & Lee 2014:1-7; DeBettencourt 2015:1-3; United States Department of Education Office for Civil Rights 2010:3-6).

Section 504 has a broader-based criterion of disability than the IDEA, and for a learner to be identified as eligible for services under Section 504 there is greater flexibility of procedures than is the case when a learner is identified for services under the IDEA. Learners are entitled to services under Section 504 if they have a mental or physical impairment that substantially limits one or more major life activities. Major life activities include: walking, seeing, hearing, speaking, breathing, learning, reading, writing, performing math calculations, working, caring for oneself and performing manual tasks. The provision of services under Section 504 requires a plan, but not a specific IEP. Under Section 504, a learner may receive test accommodations (Wright & Wright 2015:1-3).

The evaluation of learners that are to be considered for services under Section 504 draws on information from a variety of sources and is documented. Decisions about the learner are typically made by a core group that is knowledgeable about the learner, evaluation of data and placement options. Section 504 requires that learners be educated with their non-disabled peers to the maximum extent appropriate (United States Department of Education Office for Civil Rights 2010:3). Decisions do not require the written consent of the parents, only that the parents are notified. Periodic re-evaluation of the decisions is required (Andrew & Lee 2014:1-7; DeBettencourt 2015:1-3).

2.2.1.3 Individuals with Disabilities Education Act (IDEA)

The Individuals with Disabilities Education Act (IDEA) is a federal law that governs all special education services and provides funding and policy guidance for the education of learners with disabilities who need special education (National Research Council of the National Academies 2004:24). The IDEA has gone through several reauthorisations and in 2004 it was renamed the Individuals with Disabilities Education Improvement Act (IDEIA). Changes to the IDEA, by means of the 2004 Amendments, were underpinned by a movement to increase the quality of special education programmes for learners in special education by increasing accountability for results. Accountability for results is underscored by the need to benchmark all learners, including those with disabilities, so that their needs may be properly accounted for in terms of educational planning and reforming (Bakken et al. 2013:1-5; DeBettencourt 2015:1-3).

Under the IDEA, learners must meet specific criteria to be considered eligible for services. Only school-aged learners, between 3 and 21 years of age, who have one or more specified categories of qualifying conditions (i.e., autism, specific learning disabilities, speech and language impairment, emotional disturbances, traumatic brain injury, visual impairment, hearing impairment and other health impairments) that adversely affect educational performances are considered. The evaluations process requires a full and comprehensive evaluation to be undertaken by a multidisciplinary team, for which informed and written parental consent is necessary. According to the IDEA, a re-evaluation of the learner should occur once every three years or if conditions warrant a re-evaluation or if parents or teachers request a re-evaluation (Andrew & Lee 2014:1-7; Bakken et al. 2013:1; DeBettencourt 2015:1-3).

In 2004 the IDEA Amendments, alternative test-related methods of identifying a disability, were introduced. The emphasis on the severe discrepancy model, whereby the statistical difference between ability and achievement is seen as crucial, was reduced and, as such, the use of an IQ measurement as a means of assessing a discrepancy between expected and actual learning outcomes is no longer required. A contemporary model of identification of disabilities that involves Response to Intervention (RTI) was introduced. Most Response to Intervention programmes are organised around a multi-tiered system of support that allows for frequent progress monitoring, early supportive interventions and better integration of general and special education services (Bakken et al. 2013:34-61; DeBettencourt 2015:1-3; Gillet et al. 2012:25). The differences between the Severe Discrepancy and Response to Intervention models of identifying a disability are outlined in the following table:

Table 2.1 Differences between the Severe Discrepancy model and the Response to Intervention (RTI) model

Severe Discrepancy model	Response to Intervention model
<ul style="list-style-type: none"> • Delayed diagnosis (“wait and fail”) • Ability/achievement discrepancy formula • Interventions typically not delivered until special education eligibility is determined • Overreliance on summative assessments • Problem-within-child focus 	<ul style="list-style-type: none"> • Early Intervention • Frequent progress monitoring • Data-based decision making • Formative and summative assessment • Delivery of increasing levels of intervention • General education initiative with collaboration with special education • Systemic problem-solving approach

Source: Bakken et al. (2013:34)

Following the identification of a learner as being eligible for support under the IDEA, a support plan is generated. The support plan provided under the IDEA requires the generation of an IEP with specific content and a required number of participants at an IEP meeting. An IEP is created by an IEP team that includes: the learner's parents, general education teacher, school psychologist or other specialist who can interpret evaluation results and a district representative with authority over special education services. With few exceptions, the entire team must be present for IEP meetings. Accommodations may form part of the supportive measures included in an IEP (Andrew & Lee 2014:1-7; Bakken et al. 2013:1; DeBettencourt 2015:1-3).

With regard to accommodations, the accommodations that are allowed tend to vary considerably across the 50 states in America (Bolt & Roach 2009:15). Decisions about what accommodations can be considered standard or "okay" for each specific state are made at the state level, given that each state has a unique set of standards that learners are expected to meet. With this in mind, the IEP team that makes individual accommodation decisions should follow federal and state requirements and guidelines; however, when an accommodation that is considered necessary for the learner's skill to be efficiently measured is not considered standard or "okay" according to the state accommodation policy, an IEP team member may contact the state department of education in order to advocate a change in policy or to suggest that an exception be made (Bolt & Roach 2009:51-52).

2.2.2 Legislation and policies that underpin inclusion and accommodations in Finland

Finland's education system is based on a philosophy of "Education for All" and the country's cultural conservatism has facilitated stability and measured decision making in the field of education. The Basic Education Act of 2010 with Amendments and the Strategy on Special Needs Education of 2007 are the legislation and policies that guide Finnish inclusive educational practices (Finland 2007; 2010).

Within the framework of these legislations and policies, the "neighbourhood school principle" whereby learner's needs are supported within the general school is a cornerstone of Finland's inclusive education system (Graham & Jahnukainen 2011). In

keeping with the “neighbourhood school principle”, education in Finland is arranged in municipalities so as to make learners’ travels to and from school as safe and short as possible. According to the Basic Education Act, the local authority assigns the learner a neighbourhood school and where possible, support to learners is offered in this setting (Finland 2010:3).

As stated in Chapter 1, under the Basic Education Act of 2010 a three-tiered student support model is provided in Finnish schools. This comprises: general support, intensified support and special support. Early intervention is stressed, and a pedagogical approach whereby all teachers are expected to be involved in the support process is emphasised. Teachers are expected to find effective ways to collaborate, use flexible learner grouping and be innovative in their use of differentiated teaching (Thuneberg, Hautamaki, Ahtiainen, Lintuvuori, Vainikainen & Hlasvuori 2014:37-41). In Finland, there is a culture of trust and respect from the political leaders and parents that teachers know how to provide the best possible education for their learners without reliance on high-stake testing and ranking (Graham & Jahnukainen 2011). In keeping with this, eligibility for support is largely grounded on observed needs, including response to intervention (RTI), rather than diagnosed disability; formal, specialised assessment and diagnosis are not commonplace (Itkonen & Jahnukainen 2010).

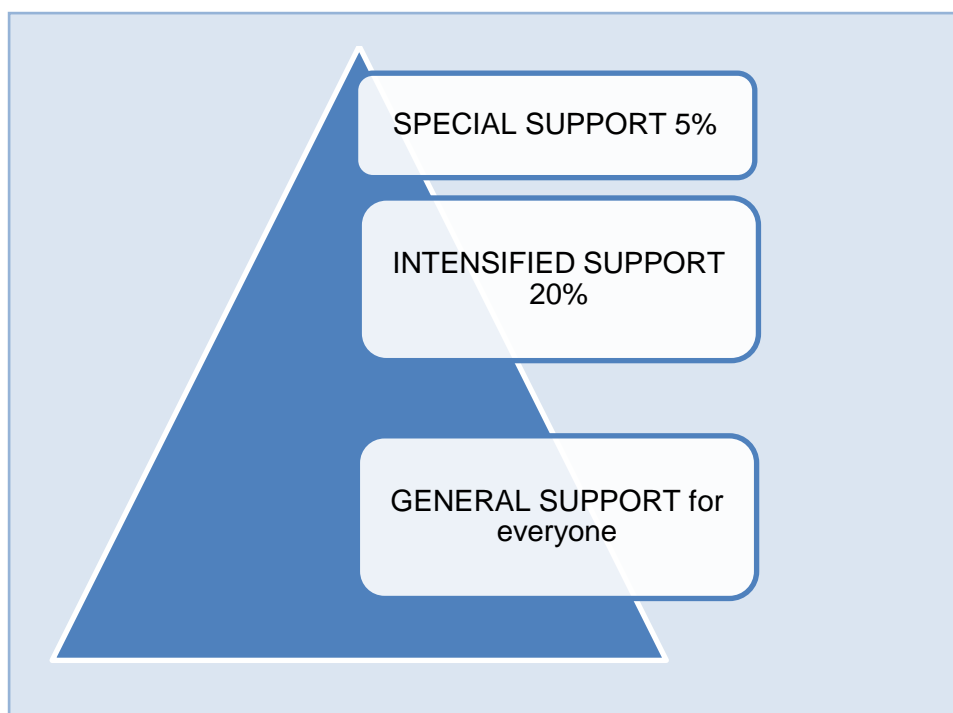


Figure 2.1 The three-tiered model of the provision of support

Source: Thuneberg et al. (2014:39)

Under the three-tiered model of support (see Figure 2.1), general support is available to all learners. Intensified support is placed between general support and the officially decided special support. Intensified support caters for learners who need regular support in learning or school going. It is envisaged that with regard to the provision of support, 20% of support will be intensified support. Intensified support is provided in accordance with a learning plan devised specifically for the learner. The learning plan, or individual education plan (IEP) as it may also be termed, is typically prepared in collaboration with the learner, parent/carer or, where necessary, a legal representative of the learner. According to the Basic Education Act of 2010, a learner who has more profound difficulties in learning or in school going than those met by general or intensified support will be entitled to special support (Finland 2010:7-9).

With regard to the division of special support, it is envisaged that 5% of support will fall into this category. Special support requires multi-professional collaboration and a sharing of knowledge and responsibilities. The part-time special support model is a noteworthy feature of the Finnish support system. The development of this model of support is key in the shift from a parallel general/special education model to a fully comprehensive model with the aim of keeping all learners in the same schooling system (Graham & Jahnukainen 2011; Thuneberg et al. 2014:39). However, it is noted that the development of “school for all” in Finland may be realised in different ways and there are also some special schools for learners with high-intensity needs (Kesälahti & Väyrynen 2013:28). In some cases, special schools have been converted into resource centres while they have also maintained their previous role as special schools for learners with severe impairments and needs (Kesälahti & Väyrynen 2013:74).

The National Core Curriculum in Finland provides the general principles and procedures for learners’ assessments. However, on the basis of the national assessment guidelines, individual schools are able to determine their own set of guidelines for learners’ assessments. With regard to individualised assessment considerations from the outset, a learner’s individual education plan (IEP) is used to help define whether they will be assessed in relation to the National Core Curriculum or whether they will need to be assessed in relation to an individualised programme of study. Against this backdrop, the school may determine the need for further specific accommodations, or assessment and examination arrangements as they are termed in Finland. A central

aim of Finland's assessment and examination arrangements is that they enable learners to demonstrate their capabilities and perform as well as possible (Pepper 2007).

Although legislation and policies and historical development of the school systems in America and Finland vary, there are commonalities in both countries' inclusion practices. The current reforms of a tiered support system and RTI are basically founded on the same principles: securing additional help for learners experiencing barriers to learning, trying to diminish the number of special education learners and to decrease the rising cost of special education (Jahnukainen & Itkonen 2015:8). However, against this common inclusive backdrop differences exist. In America, the RTI was primarily intended for diagnosing learning disabilities, whereas the Finnish RTI is mainly an administrative structure for support. Secondly, in America RTI includes clear guidelines regarding the intensity, duration and content of support provided within each tier, whereas the Finnish RTI does not include explicit guidelines for support. Thirdly, in America RTI assumes no special educational services in the first two tiers, but the Finnish RTI includes special educational services, if necessary, from the onset of support. It is noteworthy that while different interpretations and many faces of the inclusion exist, there is no single superior model or interpretation (Piia, Björn, Mikko, Aro, Tuire, Koponen, Lynn, Fuchs & Fuchs 2015:58-66).

2.2.3 Legislation and policies that underpin inclusion and accommodations in Australia

In Australia, the Disability Discrimination Act of 1992 (Fact Sheet 1) is the overarching legislation that addresses discrimination against people with a disability across a number of areas including education (Australian Government Department of Education and Training 2015a). The definition of disability used in the DDA is broad and includes: physical, intellectual, psychiatric, sensory, neurological and learning disabilities. It also includes physical disfigurement and the presence in the body of disease-causing organisms such as the HIV virus. Further to the DDA, the Disability Standards for Education 2005 (Fact Sheet 2) which is subordinate legislation made under the DDA, is in place and seeks to ensure that learners with disabilities are able to access and participate in education on the same basis as other learners (Australian Government Department of Education and Training 2005b:1; Commonwealth of Australia 2005). While the federated education systems that exist in Australia give rise to variance in

inclusive policies and practices between the Australian states and territories, the legislative mandates ensure that inclusion and discrimination-free educational services for learners are firmly established on the Australian educational landscape (Davies 2012:66-70; Keeffe-Martin 2001:2-10; Zirkel 2009:68-71).

According to the Department of Education, New South Wales (2015), learners in regular classes who experience difficulties in basic areas of learning and behaviour are primarily supported within their classes through resources available in their local schools. Learners do not need a formal disability diagnosis to access these resources. Should a learner require more intensive support, specific support classes in regular schools are provided and beyond this special school education is available. Where a child is enrolled in a support class or special school, this is done through a placement panel. Thus, a parallel system of special schools and classes for learners who experience difficulty in schools and with learning is a feature of educational support in Australia (Davies 2012:70).

In keeping with inclusive practices in Australia, inclusive assessment with an aim to increase accountability in education is an aspect of Australian education. As already stated in Chapter 1, Australian legislation and policies, with specific reference to: A National Assessment Programme for Literacy and Numeracy (NAPLAN) since 2008 and more recently, the Australian Curriculum Assessment and Reporting Authority (ACARA) 2011, promote inclusive assessment for all (Commonwealth of Australia 2011). Challenges with aspects of inclusive assessment are apparent and Davies (2012:75) cautions that learners with barriers to learning, who are struggling already, need to be guaranteed a “fair go” when participating in assessments.

With regard to the challenges of providing valid assessment for all learners, the use of testing accommodation is outlined as an effective strategy in achieving this goal. Access to the general curriculum and the opportunity to learn (OTL) is identified as a critical further strategy in facilitating testing for all learners. Testing modification is a third strategy cited as a means of achieving assessment for all and is driven by a need to review and modify test items to ensure that learners with barriers to learning have maximum accessibility to assessments (Davies & Elliott 2012:2).

2.2.4 Legislation and policies that underpin inclusion and accommodations in South Africa

The dawn of democracy in South Africa heralded the need for educational policies that mirrored the principles of the Constitution of the Republic of South Africa Act 108 of 1996 (Engelbrecht 2012:3). From this point of departure, a specific architecture of policy was developed in the first term of post-apartheid government. The policy approach favoured by the government resulted in a framework of ideal-type educational policies and in many ways the policy documents developed by the 1994 government were “state-of-the art”. They set out a vision of what an ideal education system might look like in South Africa and drew on what was judged to be best international practice at the time (Christie 2008:128-132).

The National Department of Education was given the responsibility of developing national policies for the educational system as a whole. The resultant legislative and educational policies provided the framework on which the national educational system, which recognised diversity and embraced inclusivity of learners experiencing barriers to learning within the mainstream educational environment, was launched (Donald, Lazarus & Moolla 2014:26-27).

Some of the legislation, policy documents and guidelines that have particular reference to inclusion are listed in section 1.2.4.4 and not repeated here.

The educational policies implemented by the 1994 government did not prove to be a smooth instrument of change. The policies could not be implemented as envisaged, as they were formulated in terms of what would be ideal without giving sufficient attention to the complexities of the intended process. Funding was inadequate to meet the policy designs, and a lack of planning, a dearth of adequate resources, and inadequate expertise and capacity of people working within the system compromised policy implementation. The policies which had offered such promise for an inclusive education system turned out to be blunt tools which could not bring fine-tuned results (Christie 2008:147; Wildeman & Nomdo 2007:30).

The complexity of implementing inclusion in South Africa has led some people to the point where they consider inclusion as “attempting the impossible”, and this has resulted

in suggestions that the inclusion bandwagon be abandoned (Bornman & Rose 2011:242). In acknowledgement of the challenges within the inclusive field of education in South Africa, four major areas of concern have been identified, according to Bornman and Rose (2011:246-248):

- *Uneven and inconsistent access to inclusive classrooms.* More than 80% of black learners experiencing barriers to learning live in extreme poverty and have limited access to supportive educational facilities.
- *Questionable quality of instruction.* Poorly trained teachers and the reality that inclusion is more than a “one-size-fits-all” programme are central issues underlying the instruction quality.
- *Challenging working conditions for teachers.*
- *Limited resources.* Resources needed to support learners experiencing barriers to learning are in short supply. Placement without the necessary support is akin to “dumping” and does not equate to inclusion.

However, Schwartz (2006) in Bornman and Rose (2011:242) suggests that the foundational principles of inclusion, which involve democracy, the recognition of diversity and the provision of quality education for all learners, remain highly valued by South Africans. On a positive note, the SIAS (DBE 2014a) is proving to be a useful tool in guiding the implementation of more recent inclusive practices. It reflects a noteworthy change in assessment approach from an orientation that focused on achievement, towards using assessment as a means of identifying constructive support for learning. With regard to assessment, the implementation of accommodations is a further positive inclusive practice that is gaining momentum (Walton et al. 2009:109).

2.3 THE IEB POLICY AND PROCEDURES: ACCOMMODATIONS AND EXEMPTIONS (2018) DOCUMENT

As the specific focus of this study is the school psychologist’s promotion of inclusion through the use of accommodations in independent high schools, beyond international and national legislation and policies that shape inclusion, the *IEB Policy and Procedures: Accommodations and Exemptions* document that guides the accommodations process in independent schools will be considered (IEB 2018). The procedural route for an accommodation in independent high schools, the documents

and testing requirements for an IEB accommodation application, the barriers to learning for which an IEB accommodation may be granted and the intellectual and academic test battery required for an accommodation application, and limitations thereof, will be investigated. Following this, the different types of accommodations will be discussed.

2.3.1 Procedural route for an accommodation in independent high schools

A multi-step process is in place when applying for an accommodation in an independent school. This procedure usually starts with the teacher's identification of the learner's barriers to learning within a classroom setting. Supportive measures may be implemented and the learner's response to intervention noted. If an accommodation is considered necessary, then an IEB accommodations application form may be completed and relevant accommodation testing data, which provides evidence of the barrier to learning that the learner experiences should be collected. Relevant supporting historical documents may also be collected, and a comprehensive accommodations application created. The learner's accommodation application should then be submitted to the IEB by the school. This application may be scanned and sent to the Assessment Administrator at the IEB. If the application cannot be sent electronically then the application file may be delivered to the IEB Offices in Johannesburg. The IEB Accommodations Panel will then review the application. Thereafter, the outcomes of the reviewed application will be communicated to the school and, in turn, the school will relay this information to the learner (IEB 2018:1-25).

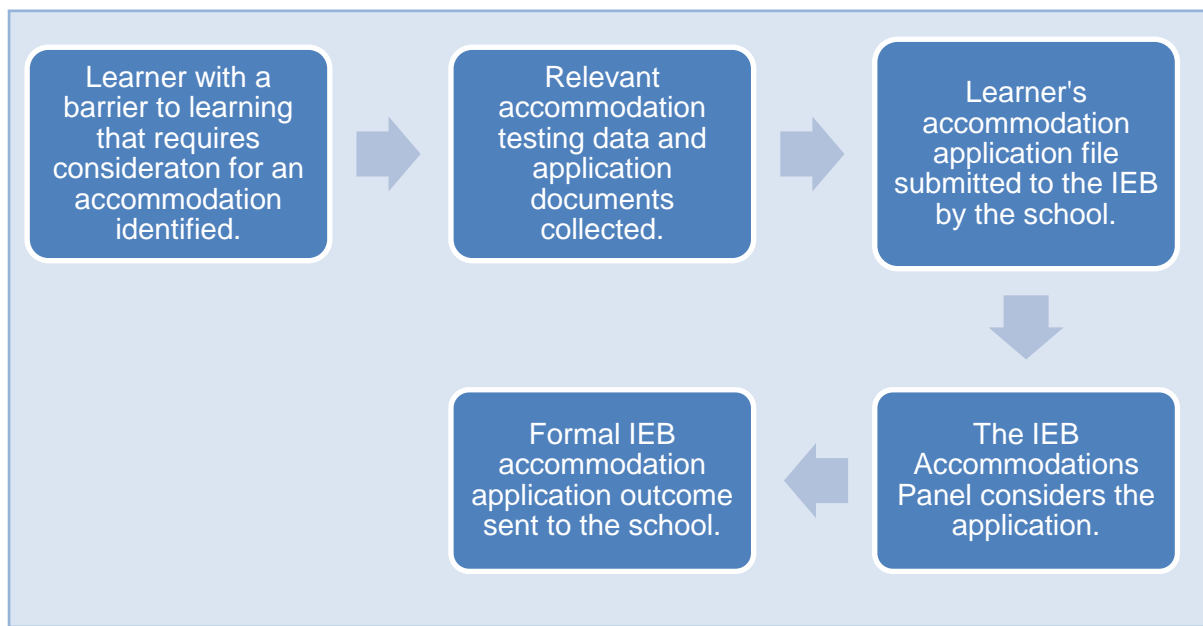


Figure 2.2 Procedural route for an IEB accommodation

Source: IEB (2018:2-3)

2.3.2 Documents and testing requirements for an IEB accommodation application

According to *IEB Policy and Procedures: Accommodations and Exemptions* (IEB 2018:2) and in alignment with Bronfenbrenner's bio-ecological model, whereby cognisance is taken of the interaction and interdependence of multiple systems that influence a learner's development, the IEB does not determine the need for accommodation allocation on psychometric information alone (Swart & Pettipher 2019:11-16). Central to all accommodation applications is the quest to attain a holistic profile of the learner from which an informed and rational accommodation eligibility decision may be made. To this end, data from a variety of sources is gathered to facilitate comprehensive understanding of the learner.

Where a psycho-educational assessment is part of the criteria necessary for an accommodation application, the IEB provides a battery of tests that may be used. The prescribed tests may be further supplemented with additional tests, should it be felt that this will assist in identifying a specific barrier to learning. With regard to a psycho-educational assessment, psychologists administering the tests need to understand the characteristics, purposes and features of formal tests (Gillet et al. 2012:409).

Cognisance should be taken of the fact that test scores represent a sample of behaviour and performance at one point in time and should be interpreted in conjunction with all supporting evidence (Gillet et al. 2012:438; Montgomery 2007:94; Jorgensen 2006:140). If a psycho-educational report is required, the onus is on the parents and school to provide a professional report that attests to the learner’s barriers to learning (Lockhart Walton 2006:102).

In Table 2.2 the guideline as to the documentation required for an accommodation application is outlined in the *IEB Policy and Procedures: Accommodations and Exemptions* (IEB 2018:7).

Table 2.2 Documents and testing requirements for an IEB accommodations and exemptions application

Barrier to Learning/ Disorder	Psycho-educational assessment	Medical report	Supporting historical evidence	Educators comments	School report	School samples	Speech and Language assessment
Visual barriers, impaired vision and colour blindness/blindness	May be requested	✓	✓	✓	✓		
Deafness/Hearing Impairments	May be requested	✓	✓	✓	✓		✓
Physical barriers	May be requested	✓	✓	✓	✓	✓	
Learning difficulty	✓	✓	✓	✓	✓	✓	May be requested
Attention Deficit Disorder ADHD /insufficient attention span	✓	✓	✓	✓	✓	✓	
Psychological conditions	✓	✓	✓	✓	✓	✓	
Medical conditions	May be requested	✓	✓	✓	✓	May be requested	May be requested
Language exemption	✓	✓	✓	✓	✓	✓	May be requested
Mathematics exemption	✓	✓	✓	✓	✓	✓	

Source: IEB (2018:7)

The decision as to whether an accommodation will be granted lies with the IEB and its Accommodations Panel and not with the psychologist who conducted the assessment or with the school (IEB 2018:2-3).

2.3.3 Barriers to learning for which an IEB accommodation may be granted

Barriers to learning are defined by Donald et al. (2014:3) as any factor, either internal or external to the learner, which causes a hindrance or barrier to that person's ability to benefit from schooling. In keeping with Bronfenbrenner's bio-ecological model, factors that create a barrier may be located in varying interrelated contexts: within the learner, within the school, within the educational system and/or within in the broader social, economic and political context (Swart & Pettipher 2019:19).

Accommodations have been embraced by the IEB as a proactive means of supporting learners experiencing barriers to learning. Accommodations typically have the effect of minimising the impact of the barrier to learning on the assessment performance of the learner experiencing such a barrier (Lockhart Walton 2006:99).

In Table 2.3 the barriers to learning for which IEB accommodation options are available are outlined.

Table 2.3 Barriers to learning for which an IEB accommodation may be granted

Strategy	Visual barriers/ impaired vision/ colour blindness	Deafness/ Hard of Hearing	Physical Barriers	Learning Difficulty	Behaviour/Anxiety/ ADD/ADHD/ Autism/ Psychiatric disorders	Other Medical Conditions
Additional time	✓	✓	✓	✓	✓	✓
Amanuensis	✓			✓	✓	
Braille	✓					
Computer	✓		✓	✓	✓	✓
Enlarged Print	✓					
Exemptions		✓		✓	✓	✓
Handwriting			✓	✓	✓	✓
Medication food/intake						✓
Practical assistant	✓	✓	✓		✓	✓
Prompter			✓		✓	✓
Reader	✓			✓	✓	
Rephrased paper		✓				
Rest breaks			✓		✓	✓
Scribe	✓		✓	✓	✓	✓
Separate venue	✓	✓	✓	✓	✓	✓
Specific equipment	✓	✓	✓			✓
Spelling				✓		

Source: IEB (2018:4)

In specific cases, an accommodation may not be sufficient to meet the learner's needs and an exemption from a particular subject may be required. Learners may be exempted from a First Additional Language and/or Mathematics or Mathematical Literacy in Grades 10 to 12. The following conditions for an exemption have been identified according to the *IEB Policy and Procedures: Accommodations and Exemptions* (IEB 2018:3):

- The learner experiences severe, intrinsic barriers in Mathematics.
- The learner experiences an intrinsic barrier to learning which manifests as dysphasia, such as expressive or receptive language disorders and/or learning, neurological or developmental disorders (e.g. dyslexia, autism spectrum disorder, traumatic brain injury).
- The learner has a significant hearing impairment.

2.3.4 Intellectual and academic assessments for accommodation purposes in independent high schools

The IEB's intellectual assessment battery includes both international and Western tests and a South African test. The assessment battery includes: Wechsler Intelligence Scale for Children–Fourth Edition (WISC-IV) or Wechsler Intelligence Scale for Children–Fifth Edition (WISC-V) the Wechsler Adult Intelligence Scale–Fourth Edition (WAIS–IV) or the Senior South African Individual Scale–Revised (SSAIS–R). With regard to academic assessments, the IEB academic test battery includes assessments that measure: timed and untimed sight word reading, timed and untimed pseudoword reading, reading comprehension, spelling and written expression abilities (IEB 2018:8-11).

2.3.4.1 The Wechsler Intelligence Scale for Children–Fourth Edition (WISC–IV)

The Wechsler Intelligence Scale for Children (WISC–IV) is an intelligence test that is intended for use with learners aged from 6 years 0 months to 16 years 11 months. The WISC-IV provides composite index scores that represent intellectual functioning in specified cognitive areas. These are the: Verbal Comprehension Index (VCI), the Perceptual Reasoning Index (PRI), the Processing Speed Index (PSI) and the Working Memory Index (WMI). The Full-Scale IQ score is the general composite score for the entire scale (Prifitera, Saklofske, Weiss & Rolfus 2005:1-8).

Figure 2.3 shows the WISC-IV test framework and corresponding subtests. Italicised subtests are optional subtests.

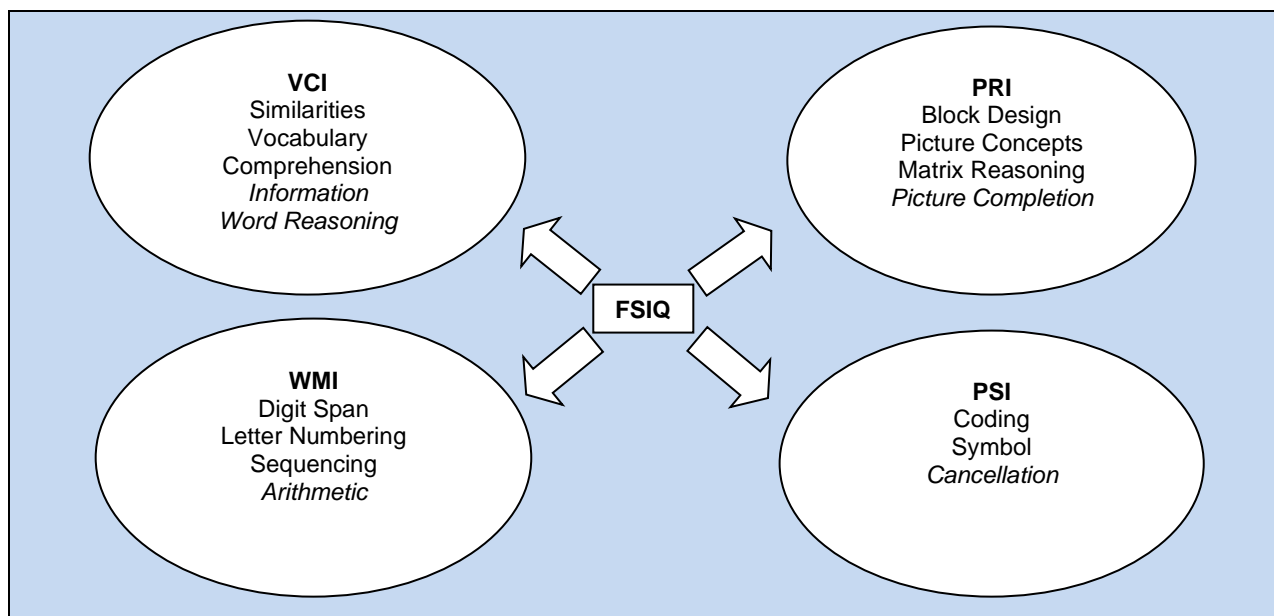


Figure 2.3 WISC-IV test framework

2.3.4.2 The Wechsler Intelligence Scale for Children–Fifth Edition (WISC–V)

The Wechsler Intelligence Scale for Children–Fifth Edition (WISC–V) is also included as an updated test option for the purpose of an IEB Accommodation application. The WISC-V is a revision of the WISC-IV. The WISC-V has four levels of interpretation: Full Scale, Primary Index, Ancillary Index and Complementary Index. The Primary Index scores, alongside the Full-Scale IQ, are recommended for a comprehensive description and evaluation of intellectual ability. There are five scales at the Primary Index scale level: Verbal Comprehension, Visual Spatial, Fluid Reasoning, Working Memory and Processing Speed (Wechsler 2014:20).

Information from the Primary Index Scale level is specifically required for the purpose of an IEB Accommodation application, but testing is not limited to this domain. Additional information from the WISC-V Ancillary Index Scale and Complementary Index Scale may provide useful insight into cognitive abilities and this may ultimately provide supporting evidence for an accommodation application.

Figure 2.4 shows the complete WISC-V test framework and corresponding subtests. Italicised subtests are optional subtests.

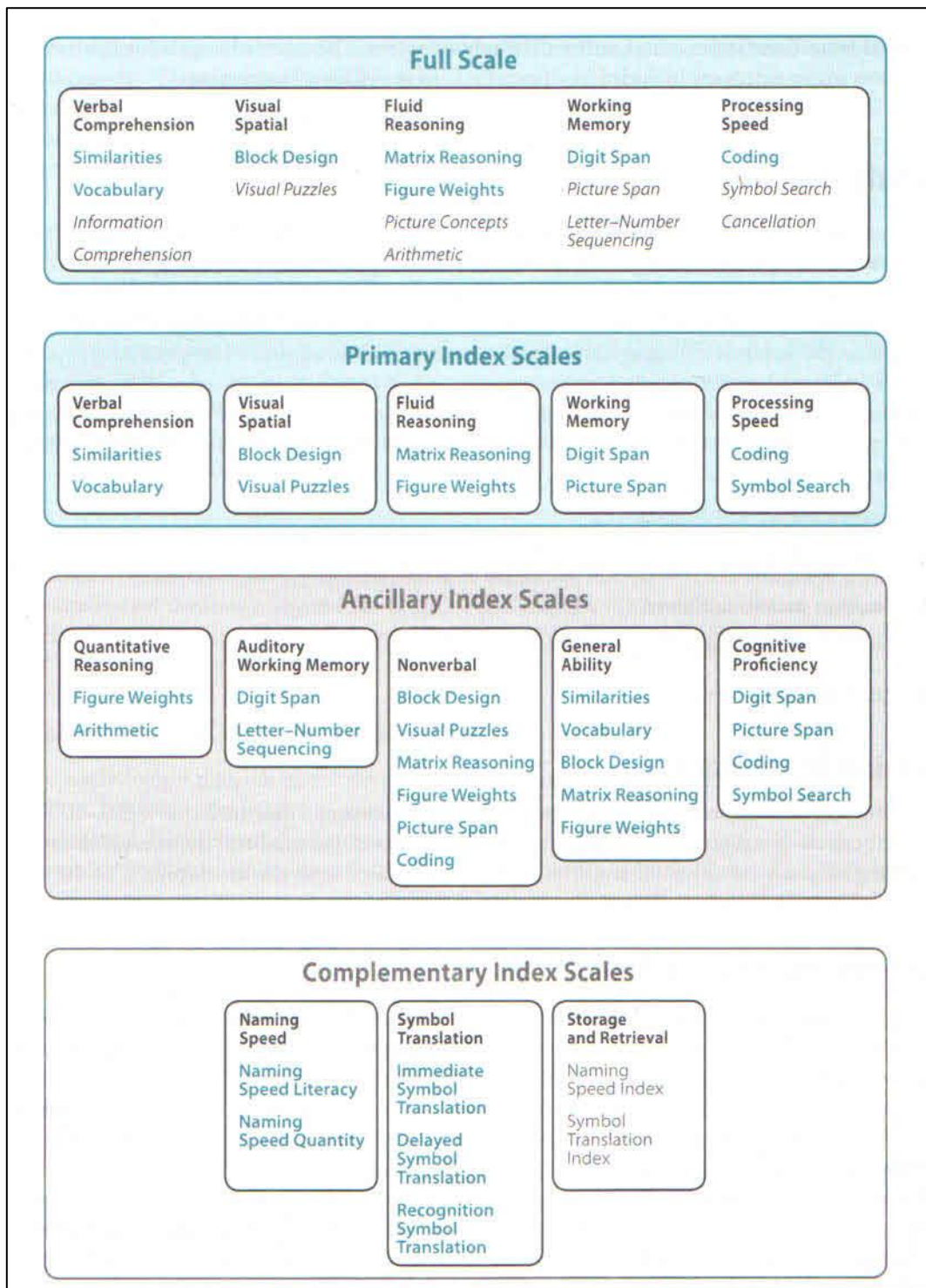


Figure 2.4 WISC-V test framework

Source: Wechsler (2014:21)

2.3.4.3 The Wechsler Adult Intelligence Scale–Fourth Edition (WAIS–IV)

In some instances, learners in independent schools are assessed for the first time when they are 17 years old, or older. It is thus important that the WAIS–IV, which has an age range of 16 to 90 years, be available for use in accommodation assessment. The test

framework of the WAIS–IV is similar to that of the WISC–IV and is organised into four index scales. These include the: Verbal Comprehension, Perceptual Reasoning, Working Memory and Processing Speed. Each index scale contributes to the Full Scale, which is used to provide a measure of general intellectual functioning (Wechsler 2008:1-8).

The test framework of the WAIS–IV, including the core and supplemental subtest composition of each Index Scale, is depicted in Figure 2.5 below:

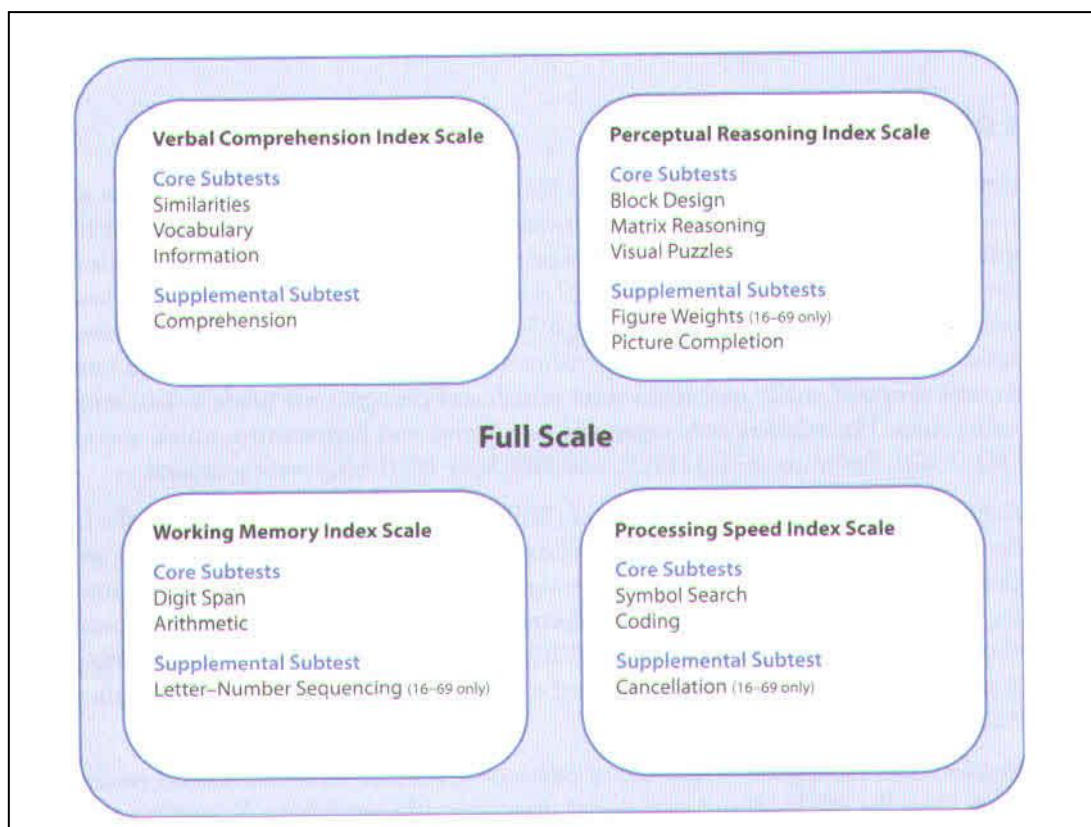


Figure 2.5 Test framework of the WAIS–IV

Source: Wechsler (2008:8)

2.3.4.4 The Senior South African Individual Scale-Revised (SSAIS–R)

The SSAIS–R (1992) is a revised version of the Senior South African Individual Scales (SSAIS) that was published in 1964. It has an age range of 7 years 0 months to 16 years 11 months. It may be used to determine a level of general intelligence and it provides a measure of verbal and non-verbal abilities (Van Eeden 1991:3).

The SSAIS–R comprises nine core subtests (five verbal and four nonverbal) and two additional subtests (one verbal and one nonverbal). The two additional subtests are not included in the composite scales but are useful if further diagnostic information is needed.

The subtest composition of the Verbal scale and Nonverbal scale is outlined in Table 2.4.

Table 2.4 Framework and subtests of the SSAIS–R

Full Scale IQ	
Verbal scale subtests	Nonverbal scale subtests
Vocabulary	Pattern Completion
Comprehension	Block Designs
Similarities	Missing Parts
Number Problems	Form Board
Story Memory	

Additional subtests (Not included in the composite scales, but useful if further diagnostic information is required)
Memory for Digits
Coding

Source: Cockcroft (2013:49-50)

2.3.4.5 Academic tests

The IEB academic test battery is slightly less prescriptive than the intellectual test battery and, to an extent, there is scope for the assessor to select a test that will best suit the learner and yield the necessary test information. Many of the academic tests included in the IEB test battery are international, Western tests and as with the use of Western intellectual tests the concerns with regard to bias, equivalence and fairness remain as already stated. Some of the academic test options include: Edinburgh Reading Test Stage 4, Test of Word Reading and Pseudoword Decoding Efficiency (TOWRE), Nfer Nelson Wordchains, Wechsler Individual Achievement Test (WIAT) Word Reading, Pseudoword Reading and Spelling, British Ability Scales (BAS) Word Reading and Spelling, Wide Range Achievement Test (WRAT) Word Reading and Spelling (IEB 2018:8-11).

2.4 LIMITATIONS OF PRESCRIBED IEB ASSESSMENT TOOLS

Psychological assessment in South Africa is fraught with controversy in respect of indiscriminate, unfair and biased use of both national and international tests; going forward, ethical consideration in assessment needs to be foregrounded (Foxcroft 2011:10; Laher & Cockcroft 2014:303).

According to Foxcroft (2011:10), it is unacceptable and unethical to use Westernised tests without adapting them, re-norming them and establishing local psychometric properties that are applicable to the South African context. With regard to the Wechsler Intelligence Scales, the WISC-IV has been standardised on an American population of 2 200 learners equally distributed for males and females with an ethnic stratification that closely matches the American 2000 census. While there has been cross-cultural investigation into WISC-IV test performance in South Africa, the test has not been standardised or adapted for use in South Africa (Shuttleworth-Edwards, Van der Merwe, Van Tonder & Radloff 2013:33-36).

The use of the WISC-IV or the WISC-V, without standardisation or adaption for the South African context, is considered a significant limitation of the test within a South African setting. It raises strong race and cultural test issues and further to this, with the legacy of apartheid in South Africa, it needs to be acknowledged that race is potentially a powerful mediator of quality of education, which in turn may influence test performances. The risk of misdiagnosis on the basis of test scores is thus illuminated as a further limitation of the current use of the international WISC-IV or WISC-V in South Africa (Shuttleworth-Edwards et al. 2013:40-43).

While cognisance is taken of the limitation of tests, such as the WISC-IV or WISC-V, that have not been standardised or adapted for use in South Africa, there appears to be disparity as to the best route forward. Stead (2002) in Shuttleworth-Edwards et al. (2013:36) highlights two possible approaches to the problem. The first line of argument proposes that Westernised tests are inherently problematic for use in South Africa and calls for the development of tests specifically for South Africa. Secondly, there is the argument that advocates re-norming of internationally based tests for use in South Africa rather than reinventing the wheel and producing local tests without the benefit of a long history of test refinement.

Commensurate with the advocacy of re-norming existing international tests rather than creating local tests, the WAIS–IV has recently been adapted for the South African context. The requirements of the South African context demanded that the WAIS–IV SA sample included second-language English speakers. This is unique to Wechsler assessment adaptations as they are usually standardised using first-language speakers only. The cultural appropriateness of instructions, verbal test content and the pictures used were taken into consideration and new norms that are applicable to the South African population have been completed (Taylor 2015:1).

With regard to local South African tests, the SSAIS–R has played a central role in the intelligence testing of South African learners since 1992, and while it is lauded as being a test of South African origin it too has limitations as a psychometric instrument.

A fundamental, key limitation of the SSAIS–R is that the test norms are outdated and its standardisation did not include black learners. The SSAIS–R was only standardised for English and Afrikaans-speaking white, Coloured and Indian South African learners. Learners attending private and special schools were also not included in the standardised sample. Tables of norms were drawn up for English and Afrikaans first-language learners who can be considered not environmentally disadvantaged. A second set of norms exists for environmentally disadvantaged learners (Cockcroft 2013:52).

Motivated by the need to use the SSAIS–R test with learners that did not have English as their mother tongue, two studies subsequently investigated the validity of the test, within a small set of black high school learners attending Model C and private schools. It was concluded from this study that the norms for the environmentally disadvantaged should be used if a learner is not tested in his or her mother language (Cockcroft 2013:48-53; Laher & Cockcroft 2014:306). Shuttleworth-Edwards et al. (2013:53) highlight a further related limitation of the SSAIS–R in that it is no longer considered valid to compare South African learners according to language usage in order to determine performance. It has become apparent that the quality of schooling is a more relevant and crucial factor in determining IQ test performance.

2.5 TYPES OF ACCOMMODATION

Inclusion extends beyond access to school and the curriculum to the point of assessment and full expression of abilities. To this end, accommodations facilitate valid portrayal of the true potential of learners experiencing barriers to learning. Accommodations are intended primarily for use by learners who are capable of taking the test, but whose specific barrier to learning adversely affects their performance under standard test administration (Goh 2004:59). Testing accommodations are made on a case-by-case basis and are ideally individualised to meet learner's unique needs (Goh 2004:39).

The term accommodation is reserved for those test changes that are believed to maintain the integrity of the test. The term test accommodation is not interchangeable with test alteration or test modification, as these terms are used when the change alters the construct intended to be measured by the test (Bolt & Roach 2009:39).

Sireci (2003) in Bolt and Roach (2009:39) proposes that test accommodations remove construct-irrelevant barriers to test performance while maintaining the integrity of the construct being measured. In the same vein of thinking, Haertel, in the National Research Council of the National Academies (2004:85), is of the opinion that the dependence of test scores on factors that are irrelevant to the construct being assessed is reduced with the implementation of testing accommodations.

As already stated, according to Bolt and Roach (2009:43) there are four major kinds of accommodation. They include: setting, scheduling, presentation and response accommodations. All of four of the major accommodations are taken into consideration by the IEB.

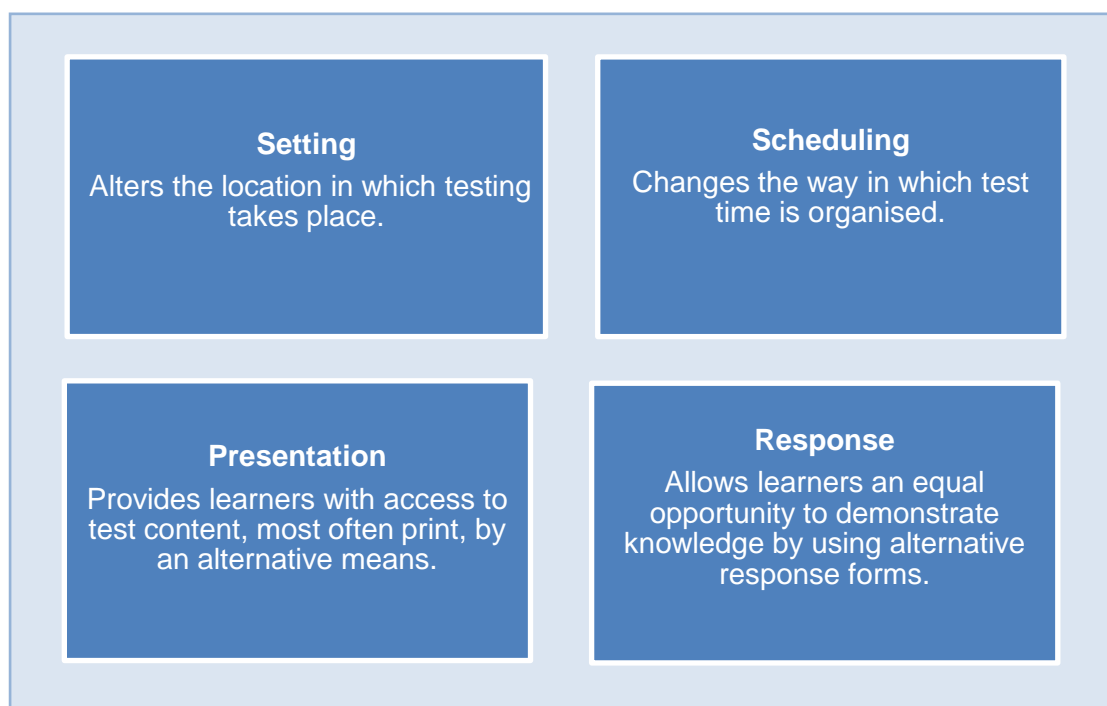


Figure 2.6 Types of accommodation

Source: Bolt & Roach (2009:43)

2.5.1 Setting accommodation

A setting accommodation alters the location in which testing takes place and allows learners to participate in a setting that is conducive to their learning and demonstration of knowledge and skill. This may involve testing in a separate venue, either individually or with a small group of other learners (Gregg 2012:51).

A setting accommodation may, however, also include modification of the testing environment to make it more conducive to the optimal performance of diverse learners. Special lighting, special acoustics, amplification devices, adaptive furniture or other equipment may be used (Bolt & Roach 2009:48-49; Bornman & Rose 2011:47; Goh 2004:42; Gregg 2012:51).

The *IEB Policy and Procedures: Accommodations and Exemptions* makes provision for setting accommodations in the forms of a separate venue and/or modification of the environment through the use of specific equipment. A separate venue is outlined as a quiet environment away from the main examination centre. The use of a separate venue is either to assist an individual learner or to prevent possible disturbance to others. In

the circumstances where the use of specific equipment may distract other learners, a separate venue may be requested (IEB 2018:4-6).

2.5.2 Scheduling accommodation

Tests are often designed to be scheduled and administered for a pre-specified amount of time. Some learners, due to their barriers to learning, may need flexibility in the timing of an examination (Luke & Schwartz 2010:2-19). Scheduling accommodations are typically changes in the duration of testing and may involve changes in how much time is allocated and how the time is organised to allow learners experiencing barriers to learning to demonstrate their knowledge and skill (Bolt & Roach 2009:43; Thurlow et al. 1998:49).

The following scheduling accommodations have been identified by Bolt and Roach (2009:47-48) and the IEB (2018:4):

- *Additional time.* This accommodation alters the allowable length of time to complete a test. According to the *IEB Policy and Procedures: Accommodations and Exemptions*, additional time is granted to learners in the form of either an additional five, ten or fifteen minutes per hour of examination.
- *Rest breaks.* In contrast to simply providing additional time, some learners benefit more from being able to take a rest break during testing. For some learners, the need to stay focused on the task for a long period of time may cause them to become fatigued and perform poorly. A break from testing may help test takers to refocus and perform consistently throughout the test. Learners who require an opportunity to take medication during an examination and/or have access to food and beverages, used to maintain sugar levels and treat low blood sugars, are also considered as candidates for a rest break accommodation. According to the *IEB Policy and Procedures: Accommodations and Exemptions*, a rest break is a period of time when a learner is not required to be at his/her desk but must remain in the examination venue. Rest break time does not count as extra writing time.

Goh (2004:43) is of the opinion that additional time is the most frequently requested accommodation. Deficits in working memory and processing speed as well as language-based difficulties that manifest themselves as barriers to learning in reading,

spelling and written expression often attract additional time as an accommodation (Gregg 2012:54-56). Physical and sensory barriers to learning may also necessitate the use of an additional time accommodation to ensure that the tests can be administered appropriately and completed to maximum effect (Bornman & Rose 2011:165).

Bolt and Roach (2009:48) propose that an additional time accommodation is one of the more disputed accommodations, given that it creates a change in testing conditions that has the possibility of benefiting all learners when a test is timed. Goh (2004:43) also alludes to the controversy surrounding an additional time accommodation and concedes that some unresolved issues exist in the use of this accommodation. One of the presenting contentious issues surrounding an additional time accommodation involves determining the appropriate amount of additional time needed by a particular test taker, and one line of argument proposes that it would be desirable to offer just the right amount of time needed by the learner rather than simply allowing a predetermined increment or multiple of the standard time. A further contentious issue raised by Goh (2004:43) involves determining whether a scheduling accommodation is truly needed by some learners, especially those experiencing psychological disorders such as ADHD and anxiety disorders. Fairness is a foundational consideration in the accommodations process and it is important that scheduling accommodations do not provide learners experiencing barriers to learning an unfair advantage over learners who do not receive accommodations (Goh 2004:40).

Furthermore, beyond additional timing and rest breaks, a scheduling accommodation may be needed if there are times during the day when a learner cannot perform optimally due to physical or mental limitations. The need for a scheduling accommodation, in these cases, is typically determined by medical regimes. Scheduling accommodations may need to be considered in order to co-ordinate assessment with the effect of medication. With regard to chronic fatigue, a scheduling accommodation may be appropriate if there are times of the day when the learner is not able to perform to full potential (Bolt & Roach 2009:58; Bornman & Rose 2011:47; Luke & Schwartz 2010:7; Thurlow et al. 1998:52).

2.5.3 Presentation accommodation

Presentation accommodations involve changes that are made to the format of the test (Goh 2004:42). The purpose of a presentation accommodation is to provide a learner with access to test content by an alternative means. For example, test items may be presented visually, in a written format, which can limit learners with poor vision and reading difficulties from demonstrating what they know. Alternative modes of access may involve the use of auditory, multisensory, tactile and/or visual modalities (Bornman & Rose 2011:47; Bouwer 2016:87; Gregg 2012:50).

According to Bolt and Roach (2009:44-45) and the *IEB Policy and Procedures: Accommodations and Exemptions* (IEB 2018:4-5), the following presentation accommodations may facilitate access to tests for learners experiencing barriers to learning:

- *Enlarged print.* This accommodation may be helpful for learners who have limited vision, but can demonstrate adequate reading skills when text size is enhanced.
- *Braille.* This accommodation will probably only be helpful to those learners who have been schooled in the use of Braille because of extremely limited or non-existent vision. In accordance with the *IEB Policy and Procedures: Accommodations and Exemptions*, when the learner has been educated using Braille, examination papers can be offered in Braille.
- *Electronic/human reader.* The electronic reader allows learners to have examination papers read to them. The *IEB Policy and Procedures: Accommodations and Exemptions* states that schools should have access to the examination portal if this accommodation is granted. Learners may also make use of an Exam Reader Pen. The pen may not have any additional functions that could assist the learner. Unless motivation for a human reader is included in the application, all reading accommodations granted will default to the electronic reader. It is also important to recognise how the provision of a read-aloud accommodation may necessitate the use of additional accommodations. For example, additional time may be needed to read aloud test items, given that speech can require more time than silent reading.
- *Rephrased examination papers.* According to the *IEB Policy and Procedures: Accommodations and Exemptions*, these are examination papers that have language adapted for learners who are deaf or hearing impaired.

2.5.5 Response accommodation

Response accommodations allow learners who are unable to respond to test items in the standardised format an equal opportunity to demonstrate knowledge by altering the manner in which the learner indicates responses (Gregg 2012:50). Tests are often designed such that learners are required to fill in responses or write extended responses to demonstrate their knowledge. Learners experiencing physical barriers to learning, writing skills deficits and written expression difficulties may find these response requirements limiting. When a test is not intended to measure physical writing skills, it may be appropriate for a response accommodation to be implemented (Bornman & Rose 2011:47; Goh 2004:42; Venter 2012:123).

The following commonly used response accommodations have been identified, according to Bolt and Roach (2009:45-46) and the *IEB Policy and Procedures: Accommodations and Exemptions* (IEB 2018:4-6):

- *Scribe*. Learners experiencing writing difficulties, due either to motor or cognitive difficulties, may have trouble demonstrating their knowledge in a test. A scribe may help learners write down answers that the learner provides to test items. It is important for scribes to be aware of the need to maintain a standardised way of recording learner's responses. In accordance with *IEB Policy and Procedures: Accommodations and Exemptions*, a scribe is required to record verbatim what the learner dictates.
- *Computers*. If learners experiencing barriers to learning in the area of handwriting are adept at using a computer, it may be appropriate to allow them to respond to test items using a computer rather than writing their answers.

The *IEB Policy and Procedures: Accommodations and Exemptions* outlines further response accommodations in the form of a handwriting accommodation. With regard to a handwriting accommodation, a sticker is placed on each of a learner's answer books. This indicates to the marker that untidy writing must be accommodated (IEB 2018:5).

2.6 CONCLUSION

This literature review serves as a cornerstone for the study and places it within the context of inclusion research both nationally and internationally. It has sought to clarify legislation and policies that underpin inclusion and accommodations in America, Finland, Australia and South Africa. While all the countries included in the study intend to promote inclusive education, their inclusive legislation and policies are shaped by context and are open to local interpretation; thus, the ways towards inclusive goals may take different routes. Kesälahti and Väyrynen (2013:91) posit that there is no one model for inclusion; it is an ongoing developmental process that takes form and shape within the context of society, local structures, school structures and classroom interaction. However, while there should be flexibility to allow for local contexts and conditions, it is important that the overarching principles of inclusion do not become excessively diluted in the process (Piia et al. 2015:46).

With regard to holding steadfastly to inclusive principles, it is evident that the doors to quality inclusive education do not swing open at a touch (Christie 2008:109). School psychologists need to become resolute instruments of change so as to make genuine inclusion a reality for learners experiencing barriers to learning. In order to attain this goal and truly become torchbearers for inclusive education, it is essential that school psychologists have an understanding of international and national legislation and policies that underpin inclusion, and more specifically that they have a comprehensive knowledge of accommodations within the IEB setting. When accommodations are thoughtfully integrated into a support plan, they can have far-reaching inclusive effects in helping learners reach and demonstrate their full potential (Luke & Schwartz 2010:5).

CHAPTER 3

ACCOMMODATIONS FOR READING AND WRITTEN EXPRESSION BARRIERS

3.1 INTRODUCTION

The school psychologist (i.e., a psychologist working at an independent school) has a broad yet pivotal role to play in supporting learners with accommodations as already described in sections 1.2.1 and 1.2.3. In determining support for the learners, the school psychologist will need to be mindful of the fact that barriers to learning and their related risk and protective factors cannot be separated from the broader environmental and personal contextual aspects of the learners (Nel 2015:2; Swart & Pettipher 2019:11-22).

As barriers to learning in reading and written expression underpin many of the risk factors that learners in the accommodation process experience, the school psychologist should have knowledge of the developmental nature of reading and written expression. To this end, the neural mechanisms and characteristics of barriers to learning in reading and written expression are considered in Chapter 3. However, the emphasis is not merely on diagnosis or the associated medical deficit model, but rather focuses on gaining an understanding of the risk factors that the barriers pose. With knowledge of barriers to learning in reading and written expression, the school psychologist will be better equipped to identify and structure protective factors needed to facilitate the learner's development.

Thereafter, against the backdrop of Bronfenbrenner's bio-ecological model, which highlights the complexity, interaction and interdependence of multiple systems that influence learners' development (Swart & Pettipher 2019:11-17), the school psychologist's supportive role is further investigated.

The associated challenges and advantages of the accommodation process that manifests across the nested systems will be discussed, and finally the learners' perceptions of how well the accommodations work. The learners' perceptions will be influenced by proximal processes, which are enduring reciprocal relationships between

learners and persons in the immediate environment and by personal characteristics such as self-determination and resilience (Swart & Pettipher 2019:12-13).

Learners and their brains are embodied in various systems such as Bronfenbrenner's micro-, meso-, exo-, macro- and chronosystems (Donald et al. 2014:45-46). The exposition of neural mechanisms of the learners' brains in Chapter 3 requires a simplified outline of basic brain anatomy. The study is more concerned with neuron networks than with individual neurons or brain cells. Neurons are primarily involved in the generation and transmission of impulses through electrical and chemical signals. In this way messages are relayed to the body (e.g. moving the hand to write) and from the body (e.g. reading). Martinez (2010:264) refers to the Hebbian model, which essentially states that neurons that fire together, wire together, i.e., the neurons form a circuit or pathway to facilitate learning. Brain plasticity or neuroplasticity is the ability to form new neural pathways and superimpose them over the old pathways, as explained in section 3.2.1. The brain's ability to make new connections with other neurons supports learning. More efficient nervous systems have more connections and communicate faster (Abadzi 2006:153). Some of these processes are ultimately labelled and assessed as processing speed, attention span, working-memory capacity and verbal reasoning skills.

The brain consists of two halves or hemispheres, a left hemisphere and a right hemisphere. Each of the hemispheres has somewhat distinct functions (Martinez 2010:240):

- The left hemisphere is more involved in language processing and the right hemisphere in the processing of spatial information.
- The left hemisphere also processes information more analytically, whereas the right hemisphere tends to process information holistically.

These functions or processes are not set in stone. The left and right hemispheres are connected. The most important connection is the corpus callosum – a bundle of nerve fibres – which permits the exchange of information between the two hemispheres.

The brain consists of a forebrain, midbrain and hindbrain. The midbrain is hidden deep in the middle of the brain and not discussed in this chapter. The outer wrinkled surface of the two hemispheres of the brain is known as the cortex; this continues to develop

into the years of adolescence through the formation of more neural pathways or neuron networks. The cerebral cortex is the largest structure of the forebrain and is involved in reasoning and cognition. The cerebellum (see Figure 3.1) and brainstem (see Figure 3.1) are components of the hindbrain. The cerebellum is at the back of the skull and regulates mainly balance and coordination. The brainstem connects the brain to the spinal cord. Information is relayed to and from the brain via the spinal cord.

On the outer circumference of the cortex, four lobes are distinguished, namely the frontal, parietal, occipital and temporal lobes. The approximate division of three of the four lobes is indicated in Figure 3.1. Although specific functions are located in particular lobes, they are also associated with other areas in the brain.

- The *frontal* lobe (in the front of the head) controls attention, reasoning, planning, problem-solving, decision-making, speech, personality and voluntary movement, among others. The prefrontal cortex (i.e., the front part of the cortex) is the most highly evolved cortex.
- The *parietal* lobe (on top of the head near the back) integrates sensory input through the somatosensory cortex. A large area of the parietal lobe is dedicated to the fingers and hands to receive and process sensory data. The parietal lobe also plays a key role in the body's spatial awareness (proprioception), for example, sitting down on a chair and not falling off.
- The *temporal* lobe (at the side of the head) processes auditory information, especially understanding language. Substructures in the temporal lobe are also involved in facial recognition, object recognition and emotional reactions. The hippocampus, situated deep in the middle of the temporal lobe, is associated with memory (Mayes 2017).
- The *occipital* lobe (at the back of the head) processes visual information. The seemingly "visual activity" of writing illustrates the functional connections between associative areas in the brain. When a learner is sitting at the desk (proprioception) and writing (fine motor control), the eyes fixate and move across the paper (visual) while holding the pen (touch) and ignoring background noise (auditory) (Krüger 2017:378).

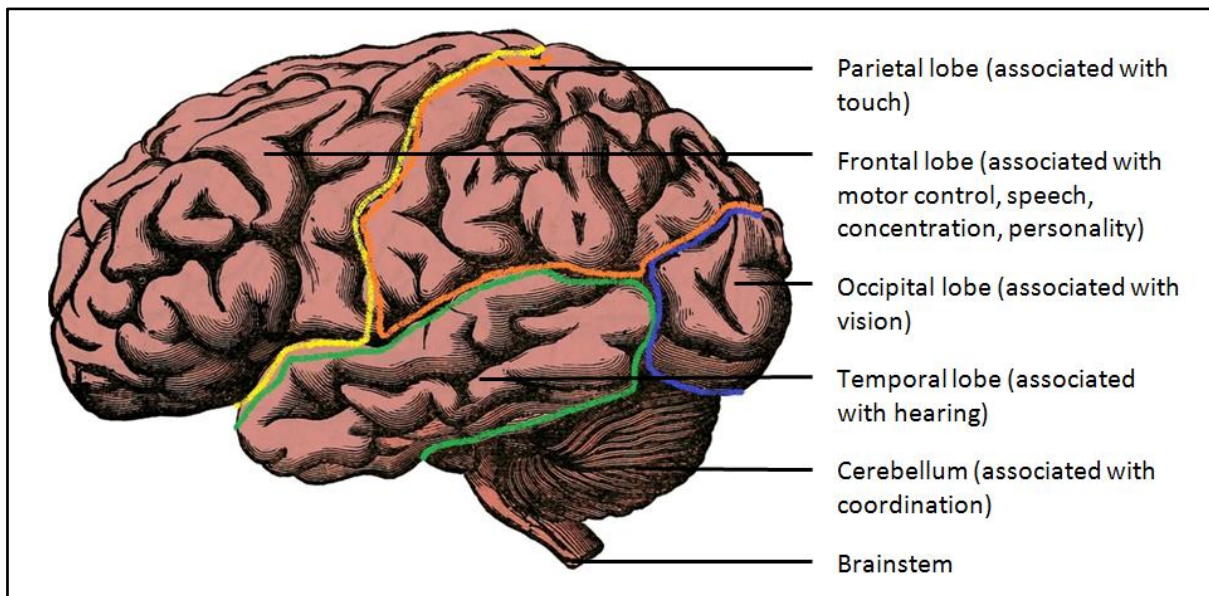


Figure 3.1 Lateral view of brain lobes, structures and functional areas – anterior/front (left) to posterior/back (right)

Source: Krüger (2018:376)

Two significant areas in the brain are associated with language processing. Wernicke's area is located towards the back of the left temporal lobe and is considered to be the language comprehension centre (Ardila, Bernal & Rosselli 2016:340-434). If the area is damaged, the individual cannot understand (or "receive") language or speak coherently. Although the speech is fluent, it is meaningless. This condition is called Wernicke's aphasia and it affects receptive language. Broca's area is involved with the articulation of spoken (or "expressed") words (Fridriksson, Fillmore, Guo & Rorden 2014:4689). Movement of facial muscles is required for sound. Damage to Broca's area causes difficulty with the pronunciation of words or fluent speech although the person can understand language. This condition is called Broca's aphasia and it affects expressive language. Broca's area is connected to Wernicke's area by a bundle of nerve fibres.

3.2 BARRIERS TO LEARNING IN READING THAT MAY ATTRACT ACCOMMODATIONS

As barriers to learning in the area of reading are the basis on which many accommodations are founded, the school psychologist is obliged to develop an understanding of the reading process and in doing so become familiar with the neural mechanisms involved in reading and the characteristics of the associated barriers to learning in reading. As well as having an understanding of the risk factors that barriers

to learning pose in reading, the school psychologist has a role to play in determining and structuring protective, supportive intervention strategies, such as accommodations, for learners whose performance is influenced by barriers to learning in reading. For the purpose of this study, the following barriers to reading, in accordance with the DSM-5 (APA 2013:67) will be considered:

- Word reading accuracy
- Reading rate or fluency
- Reading comprehension

Furthermore, although the DSM-5 (APA 2013) no longer classifies dyslexia as a separate diagnosis – it is housed under the diagnosis of specific learning disorders with added specifiers – dyslexia will also form part of the study. Dyslexia is specifically itemised in the *IEB Policy and Procedures: Accommodations and Exemptions* document as a criterion for accommodations (IEB 2018:3).

3.2.1 Word reading accuracy

In gaining an understanding of the reading process, it is noteworthy that Dehaene and Cohen (2011) in Armstrong and Squires (2015:31) describe the reading process as an evolutionarily unexpected feat. From this perspective, reading is viewed as an add-on extra that is borne out of human society and culture rather than being an innate, biologically “hardwired” activity.

With regard to the acquisition of reading skills, word reading is considered the bedrock on which the reading process develops. Dednam (2012b:144-146) identifies the following basic reading subskill components that underpin word reading:

- Word recognition by sight or sight words
- Word recognition by analysis and decoding

Ward (2015:304) acknowledges the integral roles that word recognition by sight and word recognition by decoding play in reading and he terms this process the dual-route model of reading.

According to Shanker and Ekwall (2003) in Dednam (2012b:146), word recognition by sight, or sight words as they are commonly termed, depends on high-utility words that often appear in printed texts (i.e., excluding Braille) and which the reader is able to recognise and pronounce instantly. Ekwall and Shanker (1989) in Dednam (2012b:146) identify two types of sight words:

- Basic sight words, which occur repetitively in texts (e.g., me, she, the, do)
- High frequency sight words which are specific to the individual and may be linked to personal interests or circumstances

Word recognition by analysis and decoding is a further reading subskill that guides, promotes and stabilises word reading. Word recognition by analysis and decoding occurs at multiple levels, according to Dednam (2012a:126) and Lombardino (2012:46):

- Individual letter-phoneme (a phoneme is a speech sound or phonological segment)
- Letter cluster phonemes (eg., sh, ai)
- Letter cluster syllables (eg., prefixes, suffixes and root words)
- Contextual clues, which are clues that can be gleaned from the sentence surrounding the unfamiliar word along with any clues taken from the word's spelling

Ward (2015:297) posits that it is logical to assume that the mechanisms of word reading must have a dedicated neural architecture; three neural pathways have been identified for use in reading. Early readers rely heavily on the two slower analytical neural pathways, namely the inferior-frontal area including Broca's area; and the parieto-temporal area, including the supramarginal gyrus with its link to Wernicke's area. Early readers use these pathways to link letters to sounds and to decode words (Denton et al. 2007:127; Lombardino 2012:24; Ward 2015:297-298). The location of the inferior frontal gyrus, Broca's area and the parieto-temporal area are indicated in Figure 3.2, followed by explanations of the three neural areas.

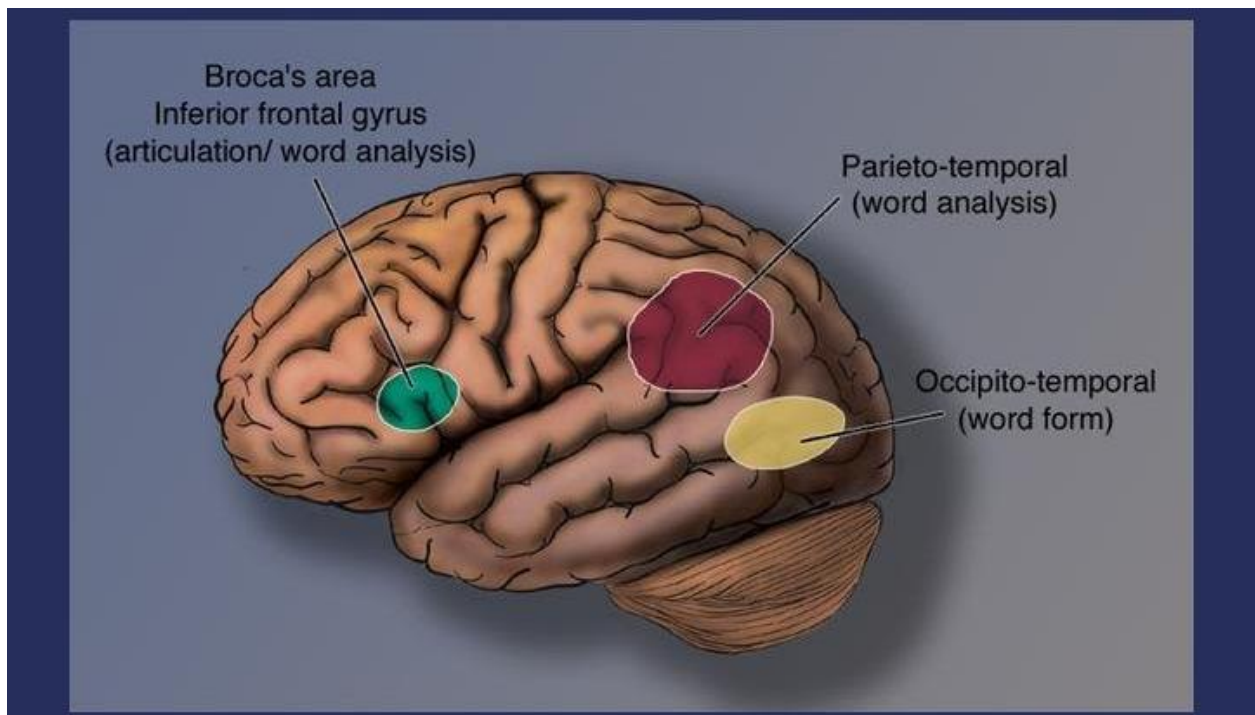


Figure 3.2 Neural systems for reading

Source: Shaywitz & Shaywitz (2007:75)

- The inferior-frontal area including Broca's area contributes to reading via the specific role that it plays in phonological encoding (converting graphemes to phonemes) and word analysis. The Broca area also has specific relevance to articulation and pronunciation of words. It would be especially activated if the response required speaking words (oral reading) (Denton et al. 2007:127; Lombardino 2012:24; Shaywitz & Shaywitz 2007:74-76; Ward 2015:307-308). It is important to note that the researcher reverted to Shaywitz (S) and Shaywitz (B) as a primary source since both authors are world-renowned. Dr. Sally is a physician in neuroscience specialising in learning development. She is the Audrey G. Ratner Professor in Learning Development at Yale University and the co-founder and co-director of the Yale Center for Dyslexia and Creativity together with Dr Bennett, the Charles and Helen Schwab Professor in Dyslexia and Learning Development at Yale University. As a physician-scientist Dr. Bennett performs cutting-edge neuroscience research and epidemiological studies to advance the neuroscience of dyslexia, published in more than 350 scientific papers. It should also be mentioned that the combination of cognition, learning and neuroscience is an emerging science. Both Dr Sally and Dr Bennett have received many rewards over the years for their pioneering work.

- The parieto-temporal area, including the supramarginal gyrus, with its link to Wernicke's area, plays a role in piecemeal phonological mapping and processing of letter strings rather than holistic recognition of the word (Ward 2015:308).

More experienced, skilled readers rely heavily on the “express route” to reading (Ragpot 2018:144), which is seated in the occipito-temporal area of the brain. The location of the occipito-temporal area of the brain is indicated in Figure 3.2.

- The occipito-temporal area, including the visual word form area is, to a large extent, responsible for rapid, automatic, fluent word reading recognition. The neurons in this area respond to and mediate the analysis of particular visual features of words and with practice an instant word recognition pathway is formed and employed for reading. This is facilitated by the specific word being “imprinted” on the semantic memory – a subdivision of the long-term memory – and permanently stored in the brain (Denton et al. 2007:127; Shaywitz & Shaywitz 2007:74-76; Ward 2015:297-298).

It is, however, noteworthy that the reading process is not restricted to the above-mentioned neural areas. The anterior and mid-temporal lobe also have a role to play in reading. These regions of the brain are strongly implicated in supporting semantic memory and it may be expected that they would contribute to the reading-via-meaning route. This may occur in terms of the provision of meaningful semantic clues that facilitate grapheme-phoneme mapping. The angular gyrus is also involved in the reading process and has been linked to verbal working memory (a memory type that stores larger, more meaningful patterns of information than the sensory memory). It is associated with integrating print information and its function in reading is likened to a relay station that links information across modalities (Denton et al. 2007:127; Lombardino 2012:24; Ward 2015:309).

Given that the focus of this study is on learners in Grades 9 to 11, it may be expected that automaticity in word recall would have been established. However, this is not always the case and at the outset the school psychologist may be involved in the assessment of learners experiencing barriers to learning in word reading. The *IEB Policy and Procedures: Accommodations and Exemptions* makes reference to using the WIAT II/III, BAS II or WRAT 4 for the purpose of assessing word reading (IEB 2018:10).

The WIAT II/III encompasses the Word Reading subtest and the Pseudoword Reading subtest. For learners in Grades 9 to 11 the Word Reading subtest provides insight into word reading accuracy and the recall of words, while the Pseudoword Reading subtest assesses the ability to apply phonetic decoding skills. A list of nonsense words is read aloud from the Pseudoword Card and the words are designed to be representative of the phonetic structure of the English Language (WIAT II UK Scoring and Normative Supplement 2002:53). Thus, both routes of word recognition are investigated.

Against the backdrop of assessment of word reading, the school psychologist may need to structure individualised support for learners experiencing barriers to learning in word reading. In order to do this, the school psychologist should be aware of the multi-tiered support system, as outlined in Figure 3.3, that may have preceded the learner's application for an accommodation. It is possible that the learner experiencing a barrier to learning in word reading may have had access to support that is typically given in Tier 1, Tier 2 or Tier 3. This support may have included "in-class" learning support or more intensified small-group support. In cases where the learner's barrier to learning is more severe, individual support with a specialist such as a Speech and Language therapist may have occurred. However, in some cases such as in under-resourced schools, learners in Grade 9 to 11 may not have received previous learning support for word reading difficulties. The supportive interventions provided by the school psychologist may include facilitation of computer-based reading programmes, or individualised support, and encouragement of increased reading exposure through accessing the school library or electronic books.

A typical framework of multi-tiered support is outlined in Figure 3.3 (Friend 2011:143; Gillett et al. 2012:27).

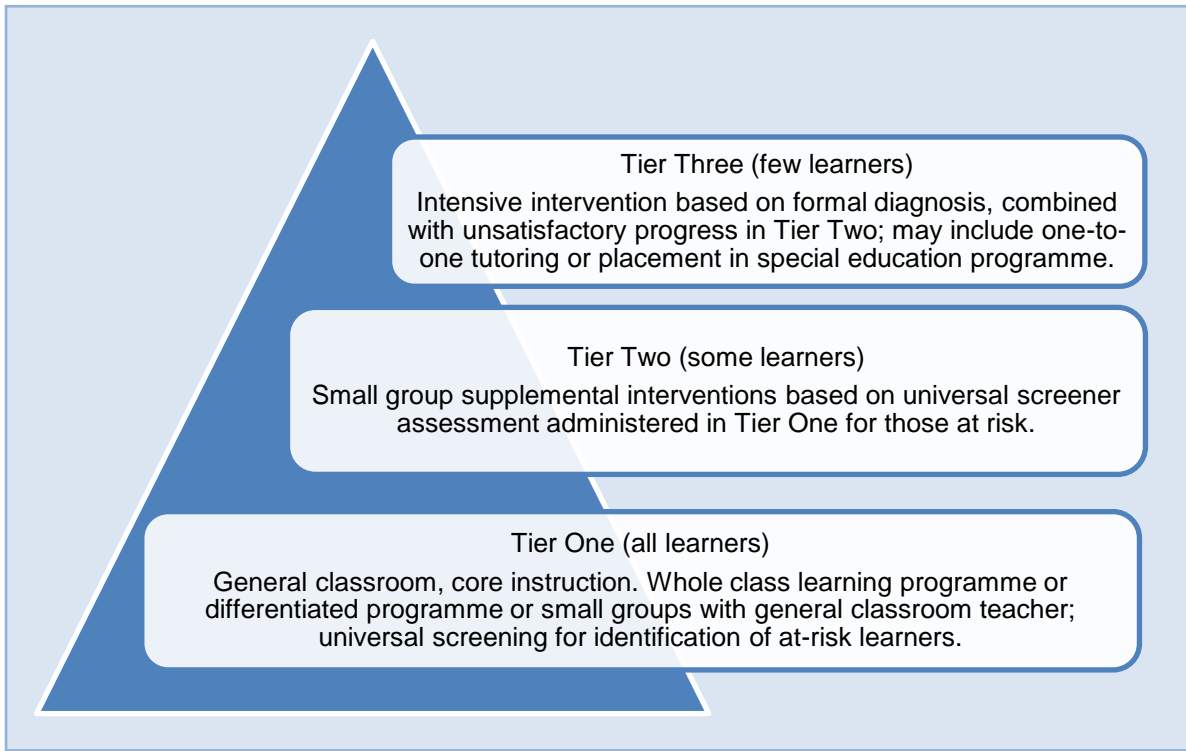


Figure 3.3 The multi-tiered structure of support

Source: Gillet et al. (2012:29)

The implementation of accommodations is another avenue of support that the school psychologist may employ in his or her interventions for learners experiencing a barrier to learning in word reading. Additional time is sometimes awarded for poor word reading, but it is acknowledged that time is not always at the root of word reading difficulties and thus may not adequately accommodate this barrier to learning. The use of an accommodation allowing the learner a reader may prove to be a more worthwhile accommodation intervention. According to the *IEB Policy and Procedure: Accommodations and Exemptions*, human readers or electronic readers may be engaged and the Exam Reader Pen (a portable, pocket-sized device that reads text aloud), may also be used for the purpose of reading (IEB 2018:5).

With regard to provision of support for learners experiencing barriers to learning in word reading, the school psychologist should be conscious of the fact that provision of an accommodation should not de-emphasise the need for interventions to address basic skill deficits. The school psychologist may need to enlist the support of teachers and/or therapists to implement the envisaged supportive strategies.

According to Shaywitz and Shaywitz (2007:74-76), the neural systems for reading are malleable, and effective reading instruction and interventions programmes may result not only in the development of improved reading skills for the learner but may also affect increased activation in the neural systems for reading. Further to the neural systems for reading being malleable, Nunley (2003:106) postulates that with regard to specific association of regions of the brain and reading, brain plasticity or neuroplasticity (Krüger & Botha 2019:312) should be recognised and in maturing brains the location for specific activities can be quite flexible (Ragpot 2018:141). However, the formation of new neural pathways is still not fully understood (Krüger 2018:378).

3.2.2 Reading rate or fluency

In keeping with the need for the school psychologist to work from an informed perspective when supporting learners with word-reading difficulties, it is similarly imperative that a school psychologist who works with learners experiencing dysfluency in reading and unproductive reading rates has an understanding of the composite processes involved in reading rate or fluency.

With regard to the mechanical process of reading rate or fluency, as was the case with word reading, it may initially be viewed as a multi-step process that begins with phonemic identification and phonemic decoding, that progresses to readers being able to process letters in larger chunks or spelling patterns and culminates over time to the word being stored in memory as a sight word. The following developmental scheme for text fluency, outlined in Figure 3.4, is described according to Lombardino (2012:53):

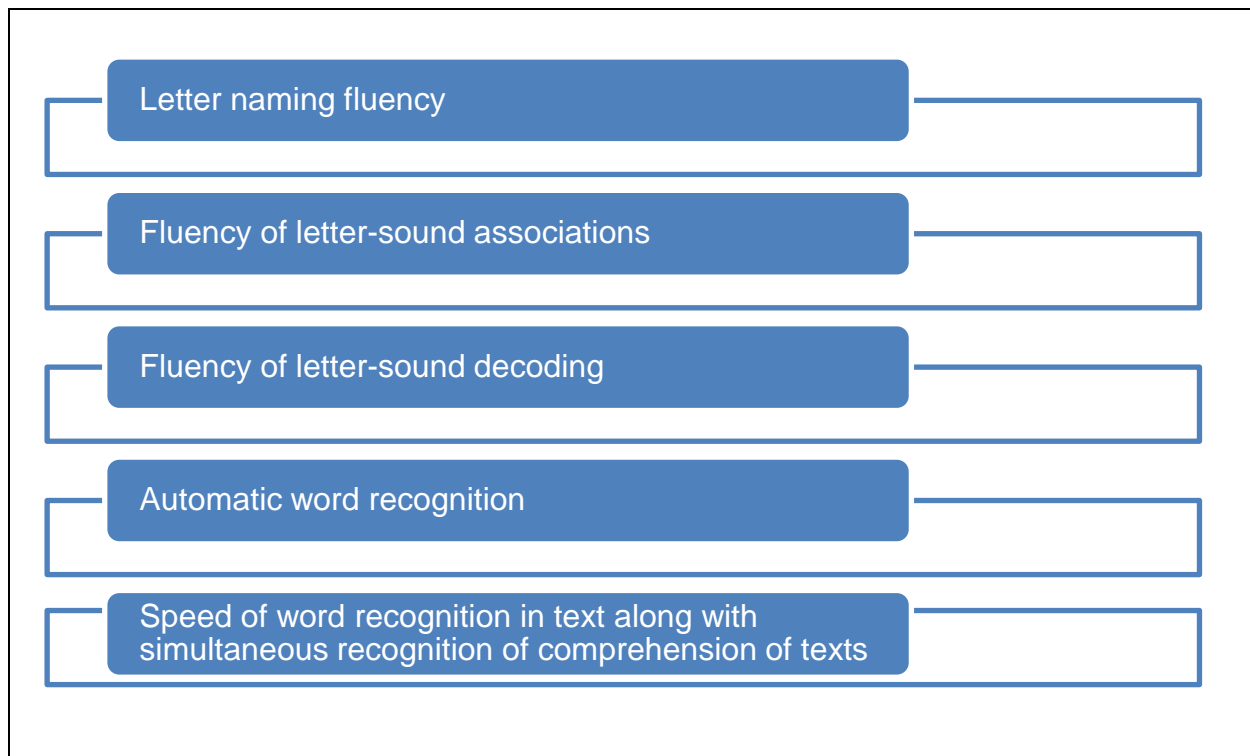


Figure 3.4 Developmental scheme for text fluency

Source: Lombardino (2012:53)

Fluency and speed of word recognition in texts allows learners to move quickly and efficiently through texts, which facilitates the development of more composite reading fluency skills, namely: expression, appropriate phrasing and volume (Gillet et al. 2012:144-151; Lombardino 2012:53).

From a neural perspective, the occipito-temporal region of the brain has a strong association with rapid word identification and reading rate (Shaywitz & Shaywitz 2007:74-76). Ward (2015:297-298) similarly postulates the existence of the so-called visual word form area of the brain, which is located in the left mid-occipito-temporal gyrus (also called the fusiform gyrus) that has a strong association with rapid visual word recognition. Reading fluency is achieved when an instant word recognition pathway is formed. Once activated, reading rate or fluency increases and thereafter, comprehension may follow suit.

From a cognitive neuroscience perspective, school psychologists should understand the principle of an instant word recognition pathway. With the benefit of a comprehensive understanding of all that is involved in reading fluency, the school psychologist should be able to help provide support for the risk factors that a slow reading rate poses to

learners. From an academic perspective, risk factors associated with slow, dysfluent readers typically involve lowered reading rates and associated difficulties in reading comprehension (Goulandris 2006:113-114).

As with barriers to learning in word reading (section 3.2.1), the supportive role of the school psychologist may initially involve the assessment of learners experiencing barriers to learning in reading rate or fluency. For the purpose of insight into reading rate or fluency, the *IEB Policy and Procedures: Accommodations and Exemptions* requires that the Test of Word Reading Efficiency (TOWRE) be completed (IEB 2018:10). The TOWRE consists of two subtests. The Sight Word Efficiency (SWE) subtest assesses the number of real printed words that can be accurately identified within 45 seconds, whereas the Phonemic Decoding Efficiency (PDE) subtest measures the number of pronounceable printed nonwords that can be accurately decoded within 45 seconds (Torgesen, Wagner & Rashotte 1999:8). Beyond performance on the TOWRE subtests, insight into reading rate or fluency may also be gauged from a qualitative analysis of performance on the WIAT II/III Word Reading and Pseudoword Decoding tests, and by taking into account the learners' test completion time on the Edinburgh Reading Test Stage 4. The WIAT II/III Word Reading and Pseudoword Decoding tests and Edinburgh Reading Test Stage 4 are also part of the educational assessment requirements for an IEB accommodation application (IEB 2018:10-11).

Against the backdrop of the neural pathways involved in reading rate or fluency; the assessment of reading rate or fluency; and the multi-tiered support structure as outlined in Figure 3.3; the school psychologist may assume an important collaborative link between the stakeholders involved with barriers to learning in reading rate or fluency is providing as many opportunities for meaningful instruction or reading opportunities as possible. At a Grade 9 to 11 level it is likely that the emphasis on this support will be on creating reading opportunities rather than instruction. The school psychologists' supportive interventions may culminate in advocating the application and implementation of accommodations. Relevant accommodations for a slow reading rate are likely to incorporate an additional time accommodation. However, the use of a reader in a separate venue may be necessary if the learner's reading rate is so slow that comprehension is compromised. Slowness in reading rate and a lack of reading fluency may also erode a learner's confidence and motivation and the need for emotional support may co-occur in a dysfluent reader's profiles (Venter 2015b:41).

3.2.3 Reading comprehension

Reading comprehension is yet another aspect of reading that the school psychologist needs to be familiar with in order to maximise understanding and support of learners experiencing barriers to learning.

The ultimate goal of reading is to comprehend and understand what has been written and it is noteworthy that reading comprehension occurs at varying levels. An elementary level of reading comprehension involves understanding the text's explicit information. Deeper, more meaningful levels of reading comprehension go beyond mere text-based information and may involve inferential, evaluative and appreciation comprehension. Inferential comprehension refers to information that is not explicitly stated in a text, while evaluative comprehension determines the correctness of a text. Appreciation comprehension entails an emotional involvement in the text (Dednam 2012b:147).

As with word reading and reading rate or fluency aspects of reading, in order to fully grasp the reading comprehension process, it is important to have an understanding of the neural systems involved in reading comprehension. As a point of departure, reading comprehension is initially underpinned by basic reading subskills acquisition, which draws predominantly on networks in the occipito-temporal area; the inferior-frontal area including the Broca area; and the parieto-temporal area, including the supramarginal gyrus with its link to Wernicke's area (Denton et al. 2007:127; Lombardino 2012:24; Shaywitz & Shaywitz 2007:74-76; Ward 2015:297-298). Where reading fluency related difficulties are experienced, brain plasticity may improve the situation. Brain plasticity or neuroplasticity is the ability to form new neural pathways and superimpose them over the old pathways. In this instance the word recognition pathway (occipito-temporal) is superimposed on the two slower pathways (left parieto-temporal and inferior frontal gyrus near Broca's area) involved in word articulation and analysis. This pathway leads to fluency and reading becomes automatic, followed by comprehension in most instances.

Barriers to learning in the area of expressive and receptive language, such as aphasia (see section 3.1), may also manifest as barriers to learning in reading comprehension. Learners with aphasia are not included in the focus of this study, only learners

experiencing dysphasia (a less severe or moderate condition than the total disruption caused by aphasia), as dysphasia is specifically referred to as a criterion for accommodations in the *IEB Policy and Procedures: Accommodations and Exemptions* (IEB 2018:3). In dealing with every aspect, the two broad categories of aphasia and the neural signature of aphasia are briefly outlined as they also involve dysphasia.

Aphasia is a disorder that results from damage or lesions to areas of the brain that are responsible for language. Aphasia occurs on a continuum and fully or partially (dysphasia) impairs the expression and understanding of language as well as reading and writing. There are two broad categories of aphasia which include: fluent aphasia and non-fluent aphasia; both of which may influence reading comprehension (Friend 2011:271; Kellogg 2003:284-285; Sutton 2011:122).

Fluent aphasia is a type of aphasia that, from a neurological perspective, is associated with damage to the Wernicke's area and it is also sometimes termed Wernicke's aphasia. In fluent aphasia, speech is fluent and effortless, although generally meaningless and nonsensical with resultant poor comprehension. Fluent aphasic learners tend to jumble phonemes within a word and sometimes non-sense words are included in their speech (Kellogg 2003:282-285; Ward 2015:276-280).

Non-fluent aphasia is a type of aphasia associated with neurological damage to the Broca's area and it is sometimes referred to as Broca's aphasia. It refers to an inability to speak fluently without effort. Non-fluent aphasia is characterised by halting, telegraphic speech that often consists of short sequences of nouns so that the grammatical structure of the sentence is disrupted. It is sometimes possible to convey a limited amount of meaning through this non-fluent speech. Non-fluent aphasia is linked to impaired motor production of expressive speech (Kellogg 2003:282-285; Ward 2015:276-280). The areas of the brain associated with aphasia are indicated in Figure 3.5.

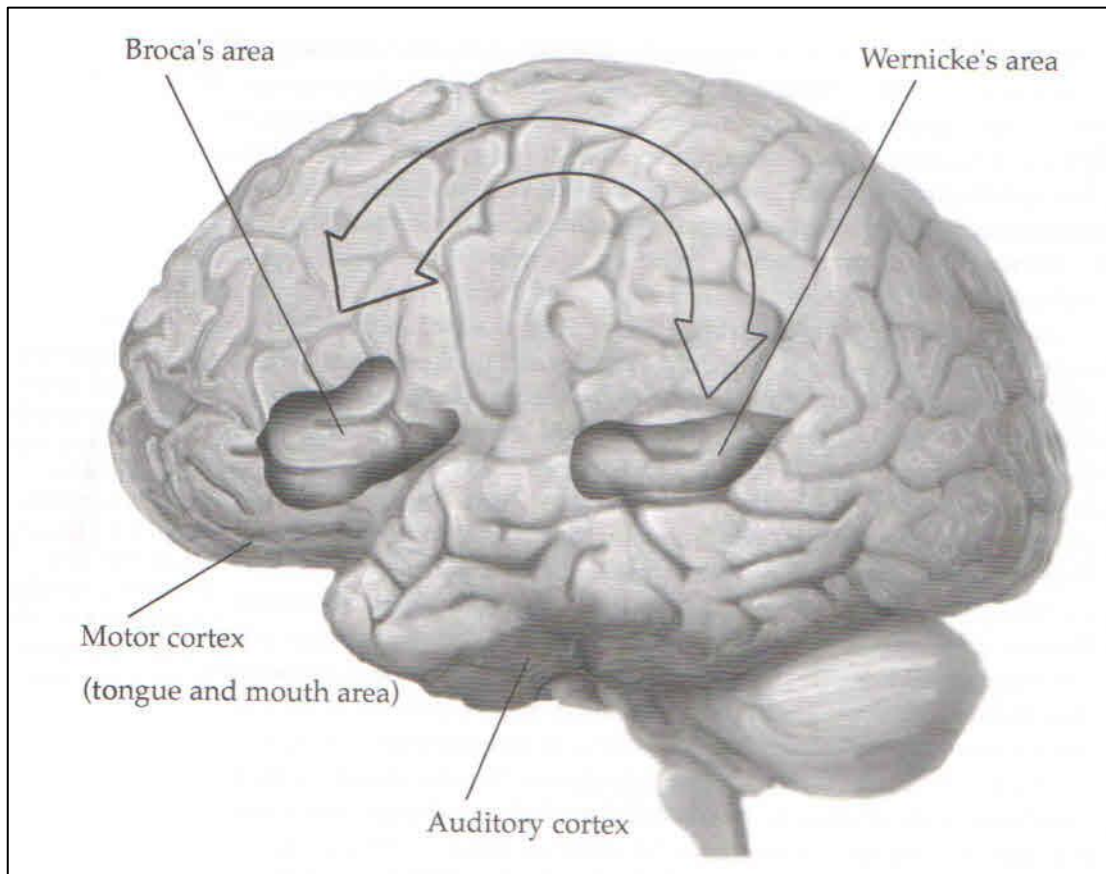


Figure 3.5 Simple schematic of areas in the brain associated with aphasia

Source: Kellogg (2003:284)

Beyond a rudimentary understanding of the neural systems involved in reading comprehension, it is important that the school psychologist recognises that reading comprehension, as with word reading accuracy and reading fluency, is a multifaceted, complex process that requires the co-ordination of a set of skills. Gillet et al. (2012:95-99), Lombardino (2012:42-53) and Nation (2006:133) suggest that reading comprehension is dependent on:

- Vocabulary development
- Sight word recall and ability to assign meaning to words
- General language skills, relevant background information and prior knowledge

Vocabulary development shows a moderately high correlation with reading comprehension. If a word is not in a learner's vocabulary it is unlikely that the learner will be able to identify the word on sight or within a sentence structure; thus, comprehension will be compromised (Perfetti 2011:23).

Leading on from vocabulary development, automaticity in sight-word recall and an understanding of the meaning of single words provides a platform for reading comprehension (Dednam 2012b:147-151). It is noteworthy that the association between sight-word recall and reading comprehension is dynamic in nature and is especially strong in the early stages of reading development. The relationship then lessens as reading comprehension becomes more closely associated with reasoning and language comprehension rather than mere word recognition (Lombardino 2012:53).

Competency in sight-word recall is further implicated in reading comprehension through the allocation of cognitive resources during reading. According to Stanovich (2000) in Lombardino (2012:52), efficiency in sight-word recall frees up cognitive resources for the purpose of attending to the meaning of the text. Focused cognitive attention on the meaning of the text, rather than the mechanics of reading, is conducive to increased reading comprehension.

With regard to competency in sight-word recall it is, however, interesting that reading accuracy is not always a guarantee that successful comprehension will follow. Reading comprehension difficulties are apparent in a minority of learners who otherwise appear to read accurately and fluently. In more extreme cases, this barrier to learning is termed hyperlexia (Nation 2006:141).

General language skills may also manifest as barriers to learning in reading comprehension. This is pertinent within a South African context, as there are eleven official languages in the country and the learners' language of instruction at school is not always consistent with their home language. However, as delimited in Chapter 1, this does not form part of this study. It is also noteworthy that according to the *IEB Policy and Procedures: Accommodations and Exemptions*, accommodations are not granted where the primary area of difficulty is with language of learning, teaching and assessment due to the fact that this language is not the home language of the learner (IEB 2018:2-3).

With regard to support for learners in Grades 9 to 11 who experience barriers to learning in comprehension, the school psychologists may be involved in the assessment of the learners' comprehensions skills. *The IEB Policy and Procedures: Accommodations and Exemptions* recommends that the Edinburgh Reading Test Stage

4 be used for the assessment of comprehension skill for the purpose of an accommodation application (IEB 2018:10). The Edinburgh Reading Test Stage 4 comprises 94 questions which are divided into five subsections, namely: Skimming, Vocabulary, Reading for Facts, Points of View and Comprehension (Edinburgh Reading Test Stage 4 Manual 2002:6). It is noteworthy that if barriers to learning in comprehension are underpinned by aphasia, it is likely that, against the backdrop of tiered support, as outlined in Figure 3.3, the learner would have had a Speech and Language assessment conducted by a Speech and Language therapist.

In the light of the reading comprehension test results the school psychologist may be able to provide, or facilitate through teachers or therapists, support that may alleviate a specific weakness or build on a strength. This support may involve vocabulary development, which at a Grade 9 to 11 level may be addressed through computer support programmes such as Vocab Genius by Brainscape. It could encompass judicious selection of teaching material and guidance with regard to specific comprehension skills (for example, reading comprehension that involves the text's explicit information and/or reading comprehension that goes beyond text-based information and includes inferential, evaluative and appreciation comprehension) (Edinburgh Reading Test Stage 4 Manual 2002:4–5).

Beyond support in the area of development of comprehension skills, the school psychologist may also be of support to the learner experiencing barriers to learning in comprehension in assisting with the application and implementation of accommodations. Accommodations of additional time and/or the use of a reader in a separate venue may prove to be supportive, protective accommodation strategies for learners in Grades 9 to 11 experiencing barriers to learning in reading comprehension (Venter 2015b:41).

3.2.4 Dyslexia

Although the DSM-5 (APA 2013:67) no longer classifies dyslexia as a separate diagnosis, it makes provision for dyslexia as an alternative term. Dyslexia is specifically itemised in the *IEB Policy and Procedures: Accommodations and Exemptions* document as a criterion for accommodations, and it is thus important that the school psychologist

is familiar with dyslexia so as to implement protective supportive factors, including, but not restricted to, accommodations for learners with dyslexia (IEB 2018:3).

Dyslexia is a term that has been loosely applied to learners, across the intellectual ability range, who experience barriers to learning in reading and spelling, despite exposure to adequate instruction (Bornman & Rose 2011:135; Snowling et al. 2020:506-507). The International Dyslexia Association defines dyslexia as a specific learning disability characterised by unexpected difficulties in accuracy and rate of decoding, word reading and text reading and spelling (Berninger & O'Donnell 2005:192).

While dyslexia is for life, it is noteworthy that its impact can change at different stages in a person's life and no two individuals will experience dyslexia in the same way. Although relatively uncommon, dyslexia may occur in later life through brain injury or degeneration and this is referred to as "acquired dyslexia" (Armstrong & Squires 2015:22).

In order to substantiate and guide identification and thereafter the implementation of protective supportive interventions for learners experiencing dyslexia, the school psychologist should have an understanding of various hypothetical causes of dyslexia. According to Perfetti (2011:21-22), several hypotheses have been identified as to the causes of dyslexia including:

- Phonological deficits
- Visual deficits
- Cerebellum dysfunction
- Genetic predisposition

The phonological deficits hypothesis is increasingly viewed as central to dyslexia and it is noted that while phonological deficits may not be the only factor involved in dyslexia, they frequently represent the most robust and specific correlate of barriers to learning in reading (Armstrong & Squires 2015:32; Bornman & Rose 2011:136; Perfetti 2011:21; Phillips, Kelly & Symes 2013:11; Shaywitz & Shaywitz 2007:74-76). Goswami (2003) in Armstrong and Squires (2015:20) proposes that the following phonological deficits may have an association with dyslexia:

- Phonetic sound perception difficulties
- Poor phonological decoding and rhyming
- Phonological loop difficulties in the working memory, which may involve challenges in repeating polysyllabic, unfamiliar words and pseudo words (It comprises acoustic encoding which processes sound with the input of the auditory sensory memory (echoic memory))
- Difficulties with word fluency, which may manifest as difficulties with rapidly naming objects and word finding

For some learners experiencing dyslexia, their barriers to learning appear to align with the visual deficit hypothesis and may be underpinned by impaired ocular control and compromised visual mechanisms. Visual deficits in the magnocellular system, which involves a deficit in the large nerve cells known as “magnocells” have been singled out as having a causal relationship with dyslexia. Deficits in this area results in the eyes not moving in a coordinated way, causing the letters on the page to be blurred or unstable, in that they appear to move or change position. This makes it difficult to decipher letters or symbols, and texts are typically challenging to read (Armstrong & Squires 2015:31-35; Bornman & Rose 2011:136; Dohla & Heim 2016:5; Montgomery 2007:86).

The cerebellum dysfunction hypothesis, or the cerebellar deficit hypothesis as it is also termed, offers another possible explanation for dyslexic learning patterns. In accordance with the cerebellum dysfunction hypothesis, a weak capacity to automatise is considered to be typical feature of dyslexia. The part of the brain involved in automaticity is the cerebellum. Furthermore, with regard to a possible neural signature for dyslexia, through the use of functional magnetic resonance imaging (fMRI) of the dyslexic brain, disruption in the two neural systems in the back (posterior) of the brain and overactivity in those situated anteriorly has been noted and associated with dyslexia (Armstrong & Squires 2015:35; Bornman & Rose 2011:137; Lishman 2006:51-52; Shaywitz & Shaywitz 2003:158-166). An fMRI creates high-resolution images that map changes in brain activity triggered by blood flow, as schematically illustrated in the neural signature for dyslexia that involves disruption of the posterior reading systems, as indicated in Figure 3.6.

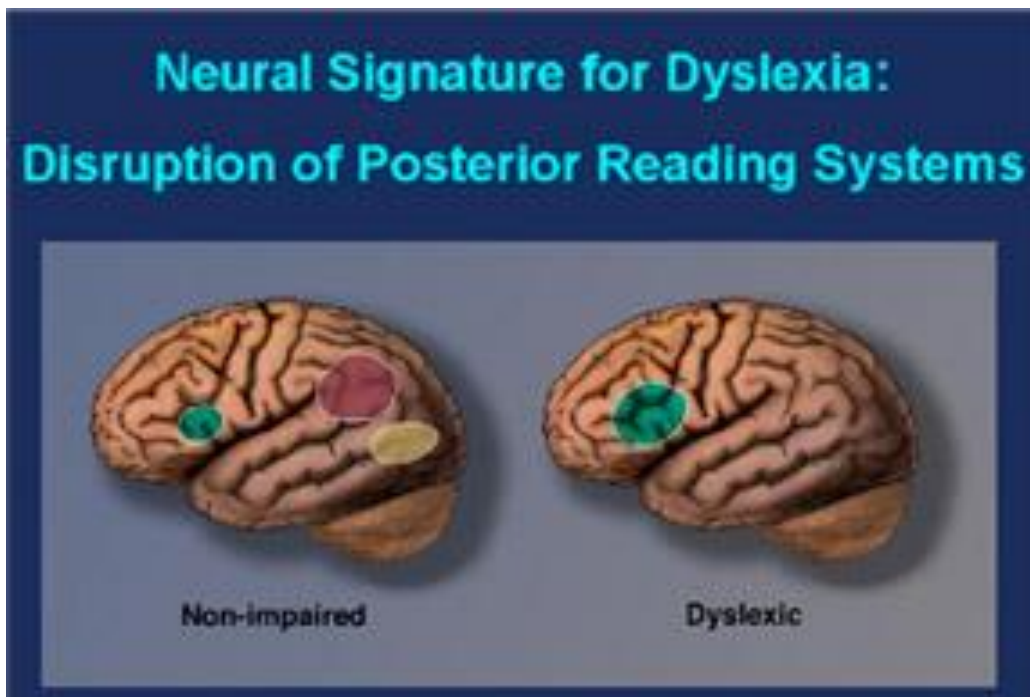


Figure 3.6 Neural signature for dyslexia: Disruption of posterior reading systems

Source: Shaywitz & Shaywitz (2003)

The need for on-going research is crucial in gaining clarity on a possible neural signature for dyslexia, but in keeping with the shift from a medical deficit approach to barriers to learning it is important that the brains of learners with dyslexia are viewed as being different rather than defective (Astone 2017:18).

According to Friend (2011:135), dyslexia may be inherited and specific genes have been identified that may predispose a learner to developing dyslexia. The genetic involvement in dyslexia suggests that dyslexia may have a familial basis. However, Rose (2009) in Borman and Rose (2011:136) notes that with regard to the genetic hypothesis it should be taken into account that families share environments as well as genes, making it difficult to disentangle the genetic and environmental contribution towards dyslexia. Duanne (2002) in Montgomery (2007:89) endorses the genetic hypothesis as being a basis for dyslexia and posits that chromosomes 15, 6 and 18 have been identified as possible locations for “dyslexic genes”. A linkage with dyslexia has also been made with chromosomes 1 and 3 (Smith 2011:248). The genetic hypothesis proposes that several genes may be linked to dyslexia and in most cases the genes appear to influence neuronal migration and axon growth (Banich & Compton 2011:444).

Snowling and associates (2020:507) propose that dyslexia should be identified to refer to a difficulty with decoding and spelling fluency which is evident from the early school years and persistent over time. It should also affect academic functioning, indicating that “progress is less good in literacy-based areas of the curriculum than that of peers in a similar setting”.

3.2.4.1 *Types of dyslexia*

Dyslexia does not present in a single, uniform manner; because of the diversity of dyslexic characteristics, varying subtypes of dyslexia have been identified. In order to afford support, including the initiation and implementation of accommodations, it is important that the school psychologist is aware of the different presentations of dyslexia. As may be expected with an area of learning as contentious as dyslexia, terminology related to the subtypes of dyslexia is not unvarying (Banich & Compton 2011; Sutton 2011:138-141; Ward 2015:305; Ziegler 2011:176).

- Surface dyslexia and dyseidetic dyslexia is characterised by disruptions in the direct route of reading with associated difficulties in the revisualisation and recall of the gestalt sight-words.
- Phonological dyslexia and dysphonetic dyslexia are characterised by disruptions in the phonological route (grapheme-phoneme-conversion). Difficulties in remembering letter sounds, analysing the individual sounds into words and sequencing or blending these into words, and an over-reliance on visual sight-word recall are typical.
- Deep dyslexia and dysphoneidetic dyslexia occur when learners cannot read and spell words because of combined difficulties with the recall of sight-words and an inability to break phonetically regular words into their sound parts. In explaining deep dyslexia, it is assumed that both reading routes are impaired.

3.2.4.2 *Identification of dyslexia*

It is important that the school psychologist has an updated understanding of relevant means of identifying dyslexia and of the controversy associated with identifying dyslexia. It is, however, envisaged that the school psychologist’s focus will not be on

identifying dyslexia for the purpose of labelling the learner, but rather for the purpose of best determining relevant accommodations and other protective needs.

With regard to the identification of dyslexia, Pumfrey (1990) in Reid (2003:132) suggests that a diagnosis of dyslexia is based on the medical-deficit model and it therefore has no place in the inclusive education context. However, according to Riddick (2012) in Armstrong and Squires (2015:83), it has proved to be stubbornly difficult to erase the medical-deficit perspective from the field of dyslexia and a wide range of diagnostic assessments strategies still occur.

An aspect of dyslexic identification that is deeply seated in the medical-deficit model is the discrepancy definition with its associated reliance on results from an IQ test to define dyslexia. Assessments of this nature have fallen from favour and are not included in the DSM-5 (APA 2013). The discrepancy definition of dyslexia recognises as dyslexia only those whose level of attainment in reading is significantly worse than would be expected on the basis of the learner's intelligence. The shortcomings of a reliance on the discrepancy model for the identification of dyslexia are included in various commentaries (Armstrong & Squires 2015:72-75; Elliott 2014:1-4; Snowling 2006:2-3):

- IQ is not indelibly linked to attainment in reading. A discrepancy between general cognitive ability and reading ability can occur for a variety of reasons besides dyslexia. Poor motivation, inattention and absenteeism may contribute to the discrepancy. An assessment that only considers scores cannot make the distinction between the different causative factors.
- For learners experiencing low cognitive ability there is not much scope for variation between scores and this means that a large discrepancy is less likely to be evident. As a result, adherence to the discrepancy definition of dyslexia may make it difficult for learners experiencing low cognitive ability to be recognised as dyslexic.
- Another problem with the discrepancy definition of dyslexia is that it cannot be used to identify younger learners who are too young yet to show a large discrepancy.

Moving away from a medical-deficit assessment driven mode of determining dyslexia, it is necessary to take into consideration a wider range of methods of identification. It is noteworthy that methods used to identify dyslexia are not necessarily mutually exclusive and it is possible that a combination of key elements is used (Reid 2003:132). The

range of options may include: behavioural observations, diagnostic interviews, formal screening tests, informal and self-reported questionnaires, brain scanning and the use of genetic indicators (Mortimore 2008:49-62). The use of an ongoing assessment structure, aligned with the Response to Intervention mode (depicted in Figure 3.3) which typically involves three tiers of progressively more intensive instruction and support, has gained momentum and prominence as an important source of diagnostic information in determining dyslexia (Armstrong & Squires 2015:63; Wagner, Waesche, Schatschneider, Maner & Ahmed 2011:203-213).

With regard to learners with dyslexia, the school psychologist will need to be proactive in providing support against a multi-tiered supportive structure. This may involve assessment. The *IEB Policy and Procedures: Accommodations and Exemption* does not stipulate a specific test that should be used for the purpose of identification of dyslexia, but it is noted that the Comprehensive Test of Phonological Processing (CTOPP) or the Phonological Assessment Battery (PhAB) is required when an accommodation for exemption from learning a First Additional Language is requested. Dyslexia is one of the itemised barriers to learning which may attract an exemption from learning a First Additional Language. However, in the case of dyslexia, it is possible that given the age of the sample of learners, Grade 9 to 11, the assessment and identification of dyslexia may already have occurred (IEB 2018).

Beyond the supportive role that a school psychologist may have in facilitating the assessment for dyslexia, it is likely that the school psychologist will be required to assist with the application and implementation of a variety of accommodations. The accommodations required are likely to vary according to the nature of dyslexia experienced and may include: additional time, disregard of spelling, the use of a reader and/or a scribe in a separate venue and exemption from learning a First Additional Language.

Beyond support in the area of academically related accommodations, an important feature of the school psychologist's protective interventions for learners experiencing dyslexia will be to provide emotional and social support. This may entail recognising the strengths of learners experiencing dyslexia and not focusing solely on the barriers to learning. Ultimately, a combination of protective factors, initiated by the school

psychologist, may lead to better outcomes for learners experiencing dyslexia (Bornman & Rose 2011:139; Venter 2015b:41).

3.3 BARRIERS TO LEARNING IN WRITTEN EXPRESSION THAT MAY ATTRACT ACCOMMODATIONS

According to the DSM-5 (APA 2013:66), impairments in written expression are found in the category of Specific Learning Disorder. The following specifiers are used:

- Spelling accuracy
- Grammar and punctuation accuracy
- Clarity or organisation of written expression

While for the purpose of this study, spelling; grammar and punctuation; and clarity or organisation of written expression are dealt with in separate sections, it is noteworthy that these barriers to learning do not typically present singularly in a learner's profile but are rather intricately interwoven.

3.3.1 Spelling accuracy

Spelling accuracy is one of the cornerstones of written expression. The acquisition of spelling skills should be viewed within a developmental framework. Learners do not suddenly move from a state of no spelling to one of complete competency in spelling (Lombardino 2012:49; Montgomery 2007:23). In accordance with the progressive stage-based scheme for developing spelling, Nel and Nel (2016:123-124) and Venter (2015b:44) describe aspects of phonetic and visual recognition of whole words in the development of spelling, which resonates with the dual route model of spelling:

- The learner initially needs to understand that letters represent sounds, and to establish a working knowledge of phonetic sound-letter symbol relations.
- Thereafter application of phonic generalisations and familiarisation with letter strings or clusters e.g., “nd”, “ing” should occur.
- The learner then become less reliant on sound-symbol strategies and more aware of the visual appearance of the word.

- In the final stage the learner is able to retrieve the word from memory and apply visual-motor skills in order to accurately spell a word in the written form.

With regard to establishing an understanding of the neural resources involved in spelling accuracy, the school psychologist may need to take cognisance of the fact that there is evidence to suggest that many of the components involved in reading are also involved in spelling and there are many shared neural resources that connect these two domains of written language (Lombardino 2012:55; Ward 2015:315-316). In spelling, however, some of the task demands are reversed to those in a reading model, as the learner is moving from the spoken word to written representation. In the reading model, grapheme-phoneme conversion is an essential feature, whereas in the spelling process phoneme-grapheme conversion is key (Ward 2015:311).

The school psychologists should understand the underlying principles of spelling so that they can offer meaningful protective strategies and empathetic support to learners experiencing barriers to learning in the area of spelling (Dednam 2012b:163). As is the case with barriers to learning in reading, the school psychologist's supportive interventions may begin with an assessment process in which a standardised test of spelling achievement may help to determine the nature and severity of the barrier to learning in spelling. The *IEB Policy and Procedures: Accommodations and Exemptions* itemises the following spelling tests that may be used when assessing spelling for the purpose of an accommodation: Vernon Graded Spelling test (2006), BAS II Spelling test, WRAT 4 Spelling test or WIAT II/III Spelling test. All these tests provide standardised scores (IEB 2018:11) to maintain a uniform format in the psychologist's report writing.

With regard to further supportive interventions, it is unlikely that spelling instruction will occur in Grade 9 to 11 learners. However, it may be possible for the school psychologist to facilitate support through advocating and facilitating the use of: dictionaries, computer spellcheck and the compilation of key subject specific words to be used in writing. Encouragement of proofreading and possible peer editing of each other's work may also prove to be useful supportive strategies (Moonsamy & Durbach 2016:228). If spelling remains a persistent barrier to learning which compromises the learners' ability to express their thoughts in the written form, then the school psychologist may need to consider facilitating the application for a spelling accommodation. A spelling

accommodation ensures that marks are not deducted for poor spelling. For some learners experiencing barriers to learning in spelling, additional time may also be an applicable accommodation as the learner may need time to recall spelling information. In severe cases, poor spelling may contribute to the need for a scribe (Venter 2015b:45).

3.3.2 Grammar and punctuation accuracy

Written expression is an advanced form of language and it encompasses a complex integration of components: spelling, handwriting and cognitive processing. The cognitive processing component involves a knowledge of the linguistic component, which encompasses grammar, and a stylistic component that entails punctuation (Dednam 2012b:158-159; Lombardino 2012:55).

Dednam (2012b:158-159) provides the following explanation of what the linguistic and stylistic components of written expression entail:

- The linguistic component of written expression involves syntactic and semantic, including grammar, aspects of language and writing. Shortcomings in this area may involve incorrect sentence construction, incorrect word usage or repetitive use of high-frequency words.
- The stylistic component of written expression includes the use of capitalisation and punctuation according to prescribed rules. Incorrect usage of capitalisation and punctuation may result in lack of clarity in written expression, and at times the meaning of a sentence may be altered.

With regard to supportive intervention for barriers to learning in grammar and punctuation, it is unlikely that the school psychologist will be involved in an assessment specifically for shortcomings in this area. It is noteworthy that in the *IEB Policy and Procedures: Accommodations and Exemptions* document there is no reference to an assessment specifically required for the purpose of identifying barriers to learning in grammar and punctuation. However, the *IEB Policy and Procedures: Accommodations and Exemptions*' document requires that the learner complete three written samples under test conditions and that three samples of schoolwork are included in an

accommodation application. An informal evaluation of grammar and punctuation usage may thus be made from these documents (IEB 2018:11-12).

For Grade 9 to 11 learners the school psychologist may facilitate the provision of practical support to learners experiencing barriers to learning in the areas of grammar and punctuation through fostering the development of the learners' proofreading skills that focus on checking for one element at a time, such as punctuation, capitalisation or sentence structure. It may be useful to use highlighters to mark punctuation when proofreading texts (Moonsamy & Durbach 2016:229).

3.3.3 Clarity or organisation of written expression

Clarity or organisation of written expression is an advanced form of language. The skills needed for spelling, punctuation and grammar, as discussed in sections 3.3.1 and 3.3.2, are fundamental components in the clarity or organisation of written expression, but writing rate may also play a vital role in the clarity or organisation of written expression.

A lowered writing rate may leave a learner compromised in terms of being able to produce a comprehensive, structured work piece with good application of spelling, grammar and punctuation skills. From a different perspective, writing rate may also influence a learner's clarity or organisation of written work, in that a slow writing rate may lead to a loss of motivation and evasion of written tasks (Montgomery 2007:52-53; Phillips et al. 2013:201).

Writing rate has its origins in motor skills and for some learners the motor skills required for handwriting can be overwhelming (Friend 2011:134). According to Alston and Taylor (1993) in Montgomery (2007:37), 10% or more of learners have mild handwriting coordination difficulties and find it difficult to form letters correctly at a reasonable speed.

Writing rate, however, does not depend solely on motor skills, but is also seen to have a relationship with spelling. Lack of automaticity in retrieval of sound-symbol knowledge and the poor visual recall of words can impede spelling and result in a slow writing pace. Furthermore, writing rate may also be influenced by working memory, as the learner may not have fully automatised letter production. Finally, the ability to remain

focused and engaged may also affect writing rate and thereafter influence clarity or organisation of writing expression (Dohla & Heim 2016:6; Friend 2011:135; Phillips et al. 2013:123).

A rudimentary understanding of the neural mechanisms involved in the complex task of clarity or organisation of written expression may allow the school psychologist to develop greater insight into relevant protective strategies applicable for this barrier to learning. The following neural mechanisms may be considered:

- Integration of visual skills and motor skills is fundamental for written expression. Different areas in the brain are responsible for integrating visual information into discrete motor plans and it is likely that this occurs in both motor and sensory association areas; the cerebellum and in subcortical nuclei (Van Hoorn, Maathuis, Peters & Hadders-Algra 2010:11).
- The voluntary motor cortex (see Figure 3.1) in the cerebral hemispheres is responsible for putting all the parts together for handwriting skill development.
- Furthermore, while the motor skill of handwriting is being learned the cerebellum (hind brain – see section 3.1) shadows the skill acquisition process and begins to automatise the process (Montgomery (2007:36-37).

With regard to the school psychologist's support, it is likely that the learner's schoolwork will form the basis on which clarity or organisation of written expression is initially evaluated. Writing rate, as a specific aspect of clarity or organisation of written expression, may need to be formally considered and for accommodation purposes an assessment will be undertaken. The *IEB Policy and Procedures: Accommodations and Exemptions* document requests that three written test samples and three classroom work samples be submitted, but it does not specify a particular test that should be used for the purpose of ascertaining work rate or clarity or organisation of written expression (IEB 2018:11-12). A norm-referenced test such as the Detailed Assessment of Speed of Handwriting (DASH) which provides standard scores for free writing and copying (Phillips et al. 2013:123) or the Allcock's Handwriting Speed Assessment, which is based on 20 minutes of continuous writing, may be useful in this regard. It is noteworthy that there is a variance in what constitutes an age/grade appropriate writing rate between these two instruments of measurement, which highlights the complexity and challenges associated with accommodation awards.

Some learners experiencing barriers to learning may benefit from support from the school psychologist, or delegated professionals, in terms of revisiting the essence of clarity or organisation of written expression. The adage “write to express not to impress” may help to remind learners in Grades 9 to 11 to develop greater awareness of clarity or organisation of expression. Furthermore, the following ideas on clarity or organisation of written expression may be considered:

- Planning the structure of the written expression using a simple mind map or key notes
- Avoiding obscure words or jargon
- Limiting sentence length and paragraph length
- Following a chronological order to document time or the steps in a procedure
- Proofreading the written text

With regard to lack of clarity of organisation of written expression, the school psychologist may need to take into consideration protective factors that involve accommodations. Additional time may be considered; alternatively, learners whose slow writing rate compromises their ability to work to potential may be eligible for the use of a scribe or the use of a digital device such as a computer desktop, laptop, tablet or iPad provided they can type fast and that connectivity is disabled to prevent copying from the internet. It is noteworthy that the use of a scribe and digital devices attracts a separate venue accommodation (Venter 2015b:46). The use of a planning aid may also be an appropriate supportive intervention (Venter 2015b:50). Furthermore, emotional support may need to be considered if learners repeatedly do not reach potential in written expression.

Table 3.1 summarises the school psychologists’ assessment procedures as required by The *IEB Policy and Procedures: Accommodations and Exemptions* in providing accommodations and support regarding the barriers to learning that are central to this study (IEB 2018).

Table 3.1 Summary of school psychologists' assessment in providing accommodations and ensuing support

Barrier to learning	Assessment	Accommodation and support
Word reading accuracy	<ul style="list-style-type: none"> - WIAT II/III, BAS II or WRAT 4 	<ul style="list-style-type: none"> - In the absence of earlier multi-tiered support system and speech therapy, facilitate: <ul style="list-style-type: none"> o Computer-based reading programmes o Individualised support o Increased reading exposure - Additional time - Human or electronic readers
Reading rate or fluency	<ul style="list-style-type: none"> - Test of Word Reading Efficiency (TOWRE) - Qualitative analysis of performance on the WIAT II/III Word Reading and Pseudoword Decoding tests + test competition time on the Edinburgh Reading Test Stage 4 	<ul style="list-style-type: none"> - Create reading opportunities - Additional time - Reader in a separate venue - Emotional support
Reading comprehension	<ul style="list-style-type: none"> - Edinburgh Reading Test Stage 4 - History of speech therapy or remedial therapy 	<ul style="list-style-type: none"> - Vocabulary development - Judicious selection of teaching material (e.g. text's explicit information) - Additional time - Reader in a separate venue
Dyslexia	<ul style="list-style-type: none"> - For exemption from First Additional Language: Comprehensive Test of Phonological Processing (CTOPP) or the Phonological Assessment Battery (PhAB) 	<ul style="list-style-type: none"> - Additional time - Disregard of spelling - Use of a reader and/or scribe in a separate venue - Exemption from learning a First Additional Language - Emotional and social support

Barrier to learning	Assessment	Accommodation and support
Spelling accuracy	<ul style="list-style-type: none"> - Vernon Graded Spelling test, BAS II Spelling test, WRAT 4 Spelling test or WIAT II/III Spelling test 	<ul style="list-style-type: none"> - Facilitate use of: <ul style="list-style-type: none"> o Dictionaries o Computer spellcheck o Compilation of key subject-specific words to be used in writing - Encourage proofreading and possible peer editing of each other's work - Disregard spelling - Additional time - Use a scribe in a separate venue
Grammar and punctuation accuracy	<ul style="list-style-type: none"> - No specific assessment - For accommodation application: <ul style="list-style-type: none"> o Three written samples under test conditions + three samples of schoolwork for informal evaluation 	<ul style="list-style-type: none"> - Foster development of proofreading skills that focus on checking for one element at a time (e.g. punctuation or capitalisation) - Suggest the use of highlighters to mark punctuation when proofreading texts
Clarity or organisation of written expression	<ul style="list-style-type: none"> - No specific assessment - For accommodation application: <ul style="list-style-type: none"> o Three written samples under test conditions + three samples of schoolwork for informal evaluation o Other useful options: Detailed Assessment of Speed of Handwriting (DASH) or Allcock's Handwriting Speed Assessment 	<ul style="list-style-type: none"> - Promote the following: <ul style="list-style-type: none"> o Plan the structure by using a simple mind map or key notes o Avoid obscure words or jargon o Limit sentence and paragraph length o Follow a chronological order to document time or the steps in a procedure o Proof-read written text

3.4 THE ROLE OF THE SCHOOL PSYCHOLOGIST IN SUPPORTING LEARNERS WITH ACCOMMODATIONS

Collaborative broad-based support is required for learners experiencing accommodations. Thus, the supportive role of the school psychologist should extend beyond acquiring an isolated understanding of relevant legislation and policies and barriers to learning; and ideally it should be structured against the backdrop of the interactive contexts of Bronfenbrenner's bio-ecological model. The bio-ecological model highlights the multiple interactions and interdependence of multiple systems that impact on learners and influence their support needs (Nel 2015:2; Swart & Pettipher 2019:11-12). Mohangi and Berger (2015:69) are of the opinion that in order to maximise support offered to the learners, the school psychologist will need to be mindful, responsive and proactive in engagement with the multiple and changing systems.

The framework of Bronfenbrenner's bio-ecological model is captured in Figure 3.7.

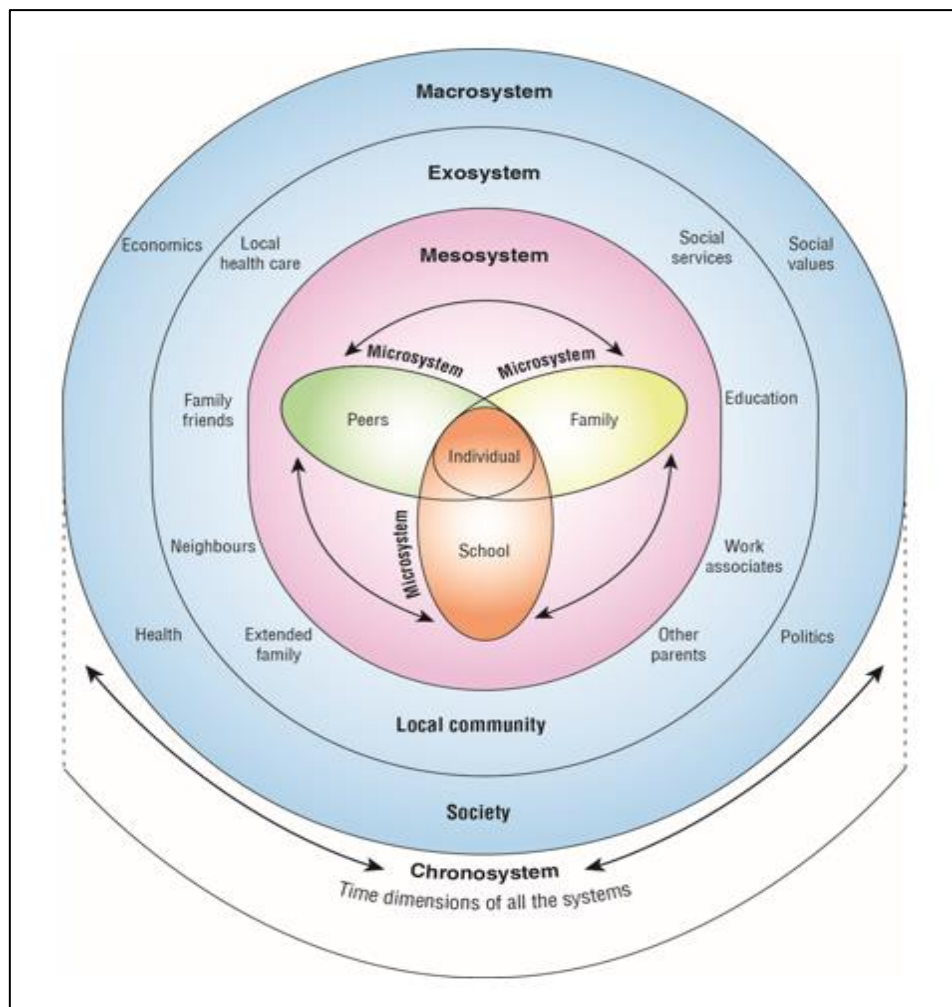


Figure 3.7 The bio-ecological model
Source: Swart & Pettipher (2019:14)

Guided by the bio-ecological model, the school psychologist's role in supporting learners in the accommodation process may focus on proximal processes that occur within the learner's contextual environment. With regard to Bronfenbrenner's bio-ecological model, proximal processes constitute the core of the model and are forms of enduring interactions that involve reciprocal relationships and interactions between the learner and persons and objects in the immediate environment. With this in mind, it is likely that the school psychologist's focus of support would initially occur in the microsystem and mesosystem (Swart & Pettipher 2019:14-15).

However, the exosystem and the more distal macrosystem also need to be taken into account, as they have an impact on the nature of interactions and give shape to the inner systems (Swart & Pettipher 2019:15).

3.4.1 The school psychologist's role of support within the microsystem and mesosystem

The microsystem is the immediate environment (physical, social and psychological) in which learners function. The mesosystem refers to the relationships or proximal processes that develop between two or more of the microsystems. At this level the family, school and peer group interact with one another, modifying each of the systems (Nel 2015:5; Swart & Pettipher 2019:15).

The microsystem and proximal processes at the mesosystem level may be protective and supportive in nature; however, conversely, they may also present as risk factors that compromise the accommodation process. Risk factors may include: abuse, divorced parents, child-headed households, alcoholic or drug-addicted parents, school bullying or violence and the rising tide of financial difficulties. In the presence of the above-mentioned risk factors, the school psychologist's role as a supportive instrument in the learners' emotional and social life may be heightened (Nel 2015:5; Prinsloo & Gasa 2016:545-547; Swart & Pettipher 2019:15).

With regard to emotional and social support that is enduring in nature, the school psychologist may consider focusing supportive efforts on the development of the learners' self-determination. Self-determination ultimately allows learners to learn skills and develop attitudes that will enable them to become positive causal agents in their

own lives (Wehmeyer & Field 2007:3-6). The development of self-determination as a protective supportive intervention for learners resonates with the basic principles of accommodations, in that they both aim to maximise the learners' ability to participate and they are both central to well-being and healthy functioning (Ryan & Deci 2006; Wehmeyer & Field 2007:66).

In order to provide support that encompasses self-determination it is important that the school psychologist is familiar with the basic premises of the self-determination theory. The self-determination theory postulates the existence of three basic universal needs: autonomy, competence and relatedness (Moneta 2013:68). Autonomy refers to being able to make independent choices that are not constrained by others and having sufficient opportunity for self-expression (Philippe & Vallerand 2008:81). Competence is conceptualised as a sense of self-efficacy, while relatedness is associated with belongingness and connectedness (Beachboard, Beachboard, Li & Adkinson 2011:853-874). A key tenant of self-determination is that the greater the level of the learners' self-determination, the more likely that the learners will be motivated to persist in the face of risks and obstacles (Ryan et al. 2009:112).

Self-determination and the associated development of the learners' autonomy, competence and relatedness has the potential to be heightened by the accommodations process. This may be attained not only through the learners' increased ability to work to potential, but also through the strengthened personal interactions that the school psychologist may facilitate within the accommodation process. Strengthened personal relationships may, in turn, influence the "school climate" and create greater scope for the development of relatedness (Beachboard et al. 2011:853-874). A further positive effect of increased self-determination that is related to autonomy is the development of the learners' self-advocacy skills. Self-advocacy may act as a protective resource and result in learners being able to articulate their needs and actively participate in negotiating the accommodations that they require to perform optimally. The implication is that through active engagement of self-advocacy, transformation occurs (Bolt & Roach 2011:54; Friend 2011:151; Mampane & Huddle 2017:9; Ndlovu & Walton 2016:6).

It cannot be expected that knowledge, skills and attitudes for self-determination will be learned without direct intervention and support of the learner. Therefore, strategies to

impart knowledge, skills and beliefs leading to enhanced self-determination may form part of the individual support given by the school psychologist to the learner. However, in the spirit of inclusion, interventions may be further reaching if the school psychologist addresses self-determination through the whole school curriculum, through family support programmes and in staff development (Hefferon & Boniwell 2011:139; Wehmeyer & Field 2007:16).

Incorporated in support focused specifically on learners with accommodations, the school psychologist has a pivotal supportive role to fulfil with regard to collaboration, and the school psychologist may constitute the central linkage in a web of stakeholders involved in the support of learners (Mohangi & Archer 2015:3). Alliance forging between various stakeholders within the systems, coupled with collaborative decision-making at multiple levels and a sharing of expertise may ultimately prove to be a vital dimension of support that the school psychologist is able to offer to learners with accommodations (Gillet et al. 2012:35-36; Mohangi & Berger 2015:69-70). Nel (2015:4) posits that when a positive alliance exists between the parents, learners and the school, including the school psychologist, it is more likely that accommodations will manifest as significant protective factors and that the accommodations process will be more readily accepted.

3.4.2 The school psychologist's role of support within the exosystem and macrosystem

The influence of the exosystem and macrosystem are also factors that the school psychologist will need to be cognisant of in terms of optimising supportive, protective systems for learners in the accommodation process. According to Mohangi and Archer (2015:3), collaboration with the wider community is increasingly considered to be essential in support of learners.

The exosystem is the contexts in which learners are not directly involved as active participants, but which may indirectly influence the learner. Examples include: the local community, the education system and related policies and regulations, the parent's workplace, the neighbourhood, other parents and family friends. As discussed in Chapter 2, the school psychologist should be knowledgeable with regard to legislation and policies pertaining to education, inclusion and accommodations, as well as being positive and proactive in collaboration and discussion of barriers to learning and the

accommodations process. The fruits of this engagement may filter through not only to the microsystem and mesosystem but may, at times also be experienced by the wider community in the exosystem (Nel 2015:3; Venter 2012:34).

The macrosystem is the most distant level of environmental influence and it refers to the dominant social and economic structures and the attitudes, beliefs and values inherent in the particular society and culture (Swart & Pettipher 2019:15). In terms of the nature of support at this level that the school psychologist offers to learners with accommodations, the attitudes, beliefs and values enshrined in the Constitution of the Republic of South Africa Act 108 of 1996, coupled with the South African Schools Act 84 of 1996 and the Education White Paper 6 of 2001, may serve as guiding principles in the school psychologist's efforts to uphold, promote and provide inclusive, protective support to learners with accommodations (Donald et al. 2004:20; South Africa 1996a, 1996b).

3.5 ACCOMMODATIONS

The types of accommodations and their usefulness was already highlighted in Chapter 1. The discussion below explores the advantages and challenges of the use of accommodations.

3.5.1 Advantages of the use of accommodations

As alluded to in Chapter 1, several advantages regarding the usefulness of accommodations are discussed below.

3.5.1.1 Opportunity for learners that experience barriers to learning to work optimally

An overarching advantage of accommodations is that they allow learners that experience barriers to learning the opportunity to work optimally within a general education setting. This is significant as the true abilities of learners experiencing barriers to learning are often shrouded beneath the difficulties that they experience (Alant & Casey 2005:186; Goh 2004:28-33).

Aligned with the above advantage is that the adaptations made in accommodation may engender and promote a greater understanding and acceptance of the concept of the universal design of assessment (Bolt & Roach 2009:38; Landsberg 2012:77). Universal design of assessment embraces the notion that from the outset assessments should be designed to be usable and accessible to the widest variety of learners, without the need for adaptations or accommodations (Bornman & Rose 2011:28; Landsberg 2012:77). In keeping with the spirit of inclusion, universal design in assessments is to the betterment of all learners, not just those experiencing barriers to learning.

Key features of universal design of assessment would be to provide multiple alternatives and ways for learners to demonstrate and represent what they know. It is envisaged that innovations in technology, such as computer-read material and digital recording programmes to record oral responses, will be employed in the universal design of assessment (Bolt & Roach 2009:125-126; Harty & Alant 2012:95-96).

3.5.1.2 Development of resilience

Enmeshed in the overarching advantage that accommodations provide in allowing learners to work to potential is the increased opportunity for learners to experience success. Allowing learners experiencing barriers to learning the opportunity to experience success in the learning environment may promote resilience and the associated ability to bounce back from adversity. Resilience is potentially advantageous in that it typically influences the learner's ability to rise above risk factors. Furthermore, resilience generally allows learners to develop a greater sense of engagement and purpose at school and in life (Baumgardner & Crothers 2008:42-47; Noble & McGrath 2008:121-130; Strydom & Lewis 2016:145-146; Swart & Pettipher 2012:10).

Heightened resilience is often accompanied by a shift in focus from negative to positive experience and, as such, embodies the basic construct of Positive Psychology. It is noteworthy that Positive Psychology does not deny the negative, but rather embraces a more balanced view of human nature that includes human strengths and virtues (Baumgardner & Crothers 2008:2).

3.5.1.3 Determining appropriate learning styles and associated study skills

A positive, though relatively uncharted, advantage that may arise from the accommodation process is that information from the accommodation driven psycho-educational assessment may be used to gain insight into the learner's learning style and associated study skills. Learning styles are characteristic learning preferences that are usually stable indicators of how the learner interacts with a task or stimuli (Reid 2005:74).

Knowledge of specific learning styles and study skills may serve as an important protective buffer against the ramification of barriers to learning (Garner-O'Neale & Harrison 2013:108-111; Reid 2003:209). According to Reid (2005:74), knowledge of learning styles is advantageous in that it can help the learners develop confidence in learning and eventually helps the learners become more autonomous in that they are able to tackle a task independently and successfully.

With regard to learning styles, Bailey and Garrat (2002) in Garner-O'Neale and Harrison (2013:107-108) suggest that most learners, not only those experiencing barriers to learning, have a special way of acquiring knowledge which may develop into a preferred style of learning and thereafter may extend to establishing related study skills.

Learning styles typically fall into three basic categories: visual, oral/auditory and tactile. It is noteworthy that learning styles do not always present as discrete entities; a combination of the basic categories often exists (Landsberg 2012:78; Bornman & Rose 2011:142). In addition to considering visual, oral/auditory and tactile preferences for learning styles and study skills development, more advanced learning styles that are rooted in personality theories and traits may at a later stage be considered (Garner-O'Neale & Harrison 2013:108).

The school psychologist may be instrumental in ensuring that the potential advantage of knowledge of learning styles and study skills, following an accommodation related assessment, translates into real-term advantages. The school psychologist may need to actively instruct learners on how to embrace learning styles and use study skills effectively. Assistance in identifying main ideas and summarising facts using oral/auditory, visual and tactile study methods may be necessary. For visually oriented

learners, the use of visual mind maps that sorts information into categories may prove to be a useful study skill. Technical devices that allow the learner to record and replay key notes may be beneficial for orally oriented learners (Dednam 2012b:157-158).

3.5.2 Challenges of the use of accommodations

The use of accommodations is not without challenges, as already stated in Chapter 1. These challenges are elaborated below.

3.5.2.1 Lack of understanding about accommodations

While accommodations are not a new, inclusive practice, a lack of awareness of accommodations may present as a fundamental challenge in the accommodations process (Bolt & Roach 2009:54).

A general lack of understanding about accommodations may result in uninformed prejudices being associated with accommodations. Some learners may choose not to disclose barriers to learning and may be embarrassed to apply for or make use of needed accommodations for fear of the stigma and potential negative label attached to accommodations (Armstrong & Squires 2015:131; Bolt & Roach 2009:53; Ndlovu & Walton 2016:4).

A further challenge that may manifest itself from limited understanding of accommodations is that learners, parents and teachers sometimes develop the misconception that the provision of accommodations signals a de-emphasis of the need for supportive interventions to address a basic skills deficit that may underpin the need for an accommodation. In these instances, accommodations may unwittingly present as a risk factor as they misguidedly result in the cessation of necessary support (Bolt & Roach 2009:53).

To counter the lack of understanding about accommodations, familiarisation of basic accommodations principles is advisable for all stakeholders involved in the accommodation process. To this end, the provision of professional training may constitute a further challenge associated with the use of accommodation. Professional training and upskilling, which may be undertaken by the school psychologist, is complex

and goes way beyond merely “workshopping” personnel. It is likely that the ability to transfer knowledge of inclusion and associated accommodations may require not only planned workshops, but also on-the-job support (Bornman & Rose 2011:247; Gregg 2011:59; Swart & Pettipher 22-23; Venter 2015c:92; Walton 2011:240-245).

3.5.2.2 *Fairness of accommodations*

The “fairness” of accommodations and consistency in allocation of accommodations is a pertinent and on-going challenge associated with accommodations (Goh 2004:39). Fairness implies not only an intention to give learners experiencing barriers to learning a fair opportunity to participate but is also underpinned by the basic premise that accommodations should not give a learner experiencing barriers to learning an undue advantage over learners without barriers to learning (Bolt & Roach 2009:49; Burns 1998:31; Nel 2015:13).

The challenge of ensuring fairness and consistency in the allocation of accommodations is, in some cases, exacerbated by the fact there may be a push for accommodations where accommodations are not necessary. The competitive entrance market to university, where the percentage gained in final examination makes a difference, has led to every avenue, including the route of accommodations, being explored for the purpose of increasing examination grade marks (Armstrong & Squires 2015:130; Elliott 2014:1-4). In keeping with the drive to secure accommodations that may not be necessary, Elliott (2014:1-4) raises concern that the assessing psychologists may come under pressure to diagnose barriers to learning, such as dyslexia, in order to procure accommodations.

A major factor that underpins the challenge of ensuring fairness in allocation of accommodations is the marked heterogeneity of learners experiencing barriers to learning who apply for accommodations. While psychometric test results may initially appear to provide an objective platform from which to determine the need for accommodations amongst diverse learners, there are challenges associated with overreliance on psychometric test results. Furthermore, there is not always a reliable single set of psychometric criteria for deciding if someone has a learning disorder, such as dyslexia, that may merit accommodations. The allocation of accommodations on

questionable test results casts doubt on the fairness of accommodations and may open the floodgate for unwarranted accommodations claims (Elliott 2014:1-4).

As discussed in Chapter 2, in a South African context the challenges surrounding the fairness of accommodation which are partly based on psychometric test results are heightened by ethical considerations of the prescribed IEB testing battery. As some of the tests in the prescribed IEB test battery are outdated and others are of international origin the question as to whether the results of such tests provide a sound basis for determining the need for accommodations may be raised.

With regard to the use of the prescribed South African SSAIS–R test it is noted that while this test is of South African origin, the norms are outdated and inappropriate for use by all South Africans as, according to Laher and Cockcroft (2014:303-314), the SSAIS–R was only standardised for English- and Afrikaans-speaking white, Coloured and Indian South African children.

The inclusion of internationally developed tests in the IEB test battery is also fraught with challenges. South Africans' cultural, educational, linguistic and environment exposure do not mirror those experienced internationally, and hence the outcomes of international tests need to be interpreted with caution (Shuttleworth-Edwards et al. 2013:43). According to Foxcroft (2011:1-19), in order to have a sufficient range of valid and reliable tests for use in Africa, it is essential to both adapt Western-oriented tests and to develop indigenous tests.

3.5.2.3 Parental involvement

It is noteworthy that while parental involvement ideally serves as a protective factor and enhances successful procurement and implementation of a learner's accommodation, at times parental involvement may constitute a challenge and may even jeopardise the accommodation process.

Parental involvement may present as challenging if there is parental disinterest or denial of the learner's barrier to learning. Opposition to the prescribed IEB psycho-educational assessment, tardiness in making available related historical evidence or medical

evidence and undermining of the validity of the psycho-educational assessment results are examples of challenging parental behaviour.

Parental misunderstanding of the measures and psychometric tools used in accommodation-related psycho-educational assessments may present as a further challenge associated with the accommodations process. A lack of understanding of the psychometric tools and associated jargon can lead to parents having unrealistic expectations with regard to the outcome of an accommodation application. This may result in parents becoming unrealistic in the pressure that they exert, on schools or the assessing psychologist or psychometrist, in order to procure accommodations for their children. With regard to the psychometric tools and associated linguistic terms used in an accommodation assessment, standard scores, which refer to performance levels, are useful in making sense of report findings but may not be common knowledge to some parents who are reading the reports. Similarly, age-equivalent scores may be confusing for parents that do not realise that half of the age group score below their age level (Armstrong & Squires 2015:29).

3.5.2.4 Quality of the psychologist or psychometrist's report

The quality of the assessing psychologist or psychometrist's report constitutes yet another area of controversy and is a further challenge associated with the accommodation process.

In a comprehensive psycho-educational report, the assessing psychologist or psychometrist's skills in interpreting and integrating, and ability to identify and comment on both consistencies and inconsistencies may set the learner in good stead for a favourable accommodation review (Phillips et al. 2013:273). Furthermore, a competent assessing psychologist or psychometrist will explore multiple sources of data before coming to an accommodation conclusion. Multiple sources of data may encompass: information from the learner and observations and evaluating data already known about the learner from the learner's family or other associated professionals (Armstrong & Squires 2015:77; Phillips et al. 2013:275-276). In keeping with Bronfenbrenner's bio-ecological model of human development, the assessment process and resultant report and assessment results should be viewed as a small defining measure of the learner (Bornman & Rose 2011:49).

With regard to the psychologist or psychometrist's assessment and report, an associated challenge that may manifest itself is that learners and their families do not often appear to experience much support beyond that given when the report is handed over by the assessing psychologist or psychometrist. It is ethically and professionally important to provide emotional support for the individual at the time of assessment and beyond this (Armstrong & Squires 2015:69). The impacts that may accompany a psycho-educational assessment and ensuing identification of barriers to learning and implementation of accommodations may carry on for a protracted period of time; by implication the assessing psychologist or psychometrist or the school psychologist may need to form a longer-term relationship with the learner and potentially the family.

3.5.2.5 Cost of the accommodation application process

The cost involved in attaining an IEB accommodation presents as a further challenge related to the accommodations process. It is of concern that the considerable monetary costs associated with an IEB accommodation may fuel the notion of an accommodation application being elitist and exclusionary.

Costs associated with an IEB accommodation are initiated by the cost incurred in attaining the psycho-educational assessment that is required for application purposes. The onus is on the parents and/or school to meet the costs of a professional report that attests to the learner's barriers to learning (Lockhart Walton 2006:102).

Thereafter the costs associated with an IEB accommodation extend further to include an application fee, payable to the IEB, on submission of the accommodation application. Beyond this, costs may spiral even further in that some accommodations require additional staff, which may come at a cost. Accommodations that may require additional staff include the use of a: human reader, scribe, prompter or practical assistant. Some schools absorb the cost of additional staff while in other instances parents are requested to reimburse additional staff required for the implementation of the accommodations.

3.5.2.6 Shortage of staff and venues

The practicality of procuring and supplying additional staff and venues needed for accommodation purposes is a very real challenge associated with the accommodation process.

Within public schools it is the responsibility of the School Assessment Team with the aid of the School-Based Support Team (SBST) to make the necessary arrangements for the implementation of accommodations (Venter 2015c:94-95). At independent schools, the responsibility of sourcing additional staff and venues may be more widely spread amongst school personnel.

The magnitude of the challenges associated with the shortage of staff and venues is of concern, as it has the potential to jeopardise the success and sustainability of the accommodation process.

3.6 PERCEPTIONS OF LEARNERS OF HOW WELL ACCOMMODATIONS WORK

No two learners will experience the accommodation process with its associated risk and protective factors in the same way.

The learner's perceptions of how well accommodations work will be influenced by many factors. An important element in shaping perceptions is the proximal processes that occur. Proximal processes, at any contextual level, may be protective and supportive in nature, but conversely, they may also manifest as risk factors. However, proximal processes on their own will not be the sole determinant of the learner's perceptions of how well accommodations work. Characteristics of the person, the context and the time fuel and direct the proximal process and, in turn, may shape the learner's perception of how well accommodations work (Bronfenbrenner & Morris 2006:795).

With regard to characteristics of a person, the bio-ecological model identifies three types of personal characteristics that influence the direction and power of the proximal process. As with proximal processes, personal characteristics may act as protective or risk factors. According to Swart and Pettipher (2019:12-13), three types of personal characteristics include:

- Dispositions such as impulsiveness, distractibility, aggression, violence, unresponsiveness, negativity or by contrast positivity.
- Ecological resources such as genetic defects, physical impairments, damage to brain function or conversely developmental assets such as knowledge, skills and experience.
- Demand characteristics such as hyperactivity versus passivity.

The learner's level of self-determination, as discussed in section 3.4.1, which may manifest as a disposition and personal characteristic, may be instrumental in shaping the learners' perceptions of how well accommodations work. Through the direction of the school psychologist, if the learning environment and "school climate" enhance the learner's self-determination and associated feelings of autonomy, competence and relatedness then this may facilitate improved motivation and educational outcomes, which may ultimately foster positive perceptions of accommodations.

Similarly, the learner's resilience and positive disposition, as discussed in section 3.5.1.2, which could manifest as personal characteristics, may influence the learner's perceptions of how well the accommodations work. The concept of resilience is embedded in the Positive Psychology model. The Positive Psychology model involves a shift in focus from deficits, problems and treatment to a preventative focus on human strengths and the intentional promotion of wellbeing and resilience (Baumgardner & Crothers 2008:2; Noble & McGrath 2008:119; Ruch, Weber, Park & Peterson 2013:1-7).

A major tenet of the Positive Psychology model is that resilience and positive personal characteristics are dynamic and extend beyond inherent positive dispositions to include routinely practised activities or states that have the potential to improve how a learner perceives and reacts to a situation. According to the Positive Psychology model, positive personal characteristics may be cultivated, honed and developed into resilience skills which, in turn, may influence how a learner perceives and reacts to situations and deals with challenges, such as those associated with accommodations (Baumgardner & Crothers 2008:57).

Resilience develops along many pathways and the school psychologist's supportive interventions, aligned with accommodations, may strengthen resilience and thereafter contribute to a learner's positive perceptions of how well accommodations work

(Mampane & Huddle 2017:1-2; McGrath & Noble 2011:10; Noble & McGrath 2008:123; Patterson & Joseph 2007:117-139). However, with regard to resilience and the Positive Psychology model there is a limit to the power of positive personal characteristics and the development of resilience, and it should not be viewed as a miracle predictor for positive perceptions of accommodations. At best, resilience contributes to “faring better” and developing a “better” perception of accommodations. This resonates with a core principle of accommodations, in that accommodations are part of the inclusion process and should not be viewed as absolute in their capacity to resolve all difficulties associated with barriers to learning (Baumgardner & Crothers 2008:50-62).

3.7 CONCLUSION

The school psychologist has a pivotal function in supporting learners experiencing barriers to learning who are in the accommodation process. As barriers to learning in reading and written expression underpin many of the risk factors that learners with accommodations encounter, it is imperative that the school psychologist has an understanding of the developmental nature of reading, spelling and written expression and their related barriers to learning in order to best support the learners.

However, barriers to learning and the accommodations process cannot be viewed as an isolated phenomenon and the role of the school psychologist in supporting learners should not be separated from the interrelated contextual systems within which the learners function. Taking into account Bronfenbrenner’s “nested” interrelated contextual systems, the school psychologist has an important role to play in supporting learners with accommodations by becoming the central linkage between stakeholders in various contextual systems (Mohangi & Archer 2015:3). Beyond providing collaborative linkage with stakeholders, the school psychologist may also foster positive, protective factors to buffer the risks that learners in the accommodation process experience. This may be achieved by the school psychologist becoming a vehicle for care, emotional support and development of learners’ pathways to resilience and self-determination (Mampane & Huddle 2017:1).

The accommodation process is resource intensive. A sense of community, co-operation and collaboration needs to prevail when working in this area of inclusive education (Walton 2011:243-244). Ideally, if accommodations are embraced from the perspective

of the bio-ecological model, which highlights the merits of collaborative broad-based supportive interventions across varying contexts, then accommodations may ultimately be celebrated as being for the general good of the entire school community. The advantage of embracing supportive interventions for the good of all learners is captured in the Figure 3.8.



CLEARING A PATH
FOR PEOPLE WITH SPECIAL NEEDS
CLEARS THE PATH FOR EVERYONE!

Figure 3.8 Supportive interventions for the good of all

Source: Giangreco & Doyle (2007:1)

CHAPTER 4

RESEARCH DESIGN AND METHODS

4.1 INTRODUCTION

The following chapter examines the process taken by the researcher to explore and describe the promotion of inclusion by the school psychologist through the use of accommodations in independent high schools.

In order to examine this broad-based area of study it is necessary to pose questions that narrow the focus of study without compromising or constraining the qualitative researcher. The following sub-research questions and resultant data were used to this intent:

- What policies underpin inclusion and accommodations in independent high schools?
- What is the nature of accommodations available to independent high school learners?
- What are the school psychologist's perceptions of the use of accommodations in independent high schools in general?
- What support may the school psychologist provide to learners who require accommodations?
- What are the learner's perceptions of the use of accommodations in independent high schools?

As stated in Chapter 1, while lessons are learned from exposure to international research, South Africa's unique past and complex current state of education demands a distinctive investigation into inclusive actions (Walton et al. 2009:105-106). The research base of accommodations as a means of inclusion in South Africa is not yet well established, and it is envisaged that this study will provide an added dimension to existing research. The review of the literature in the previous two chapters exposed the inclusive nature of support; this does not only apply to the school psychologist's potential role of promoting inclusion through accommodations in independent high

schools, but also to the general inclusive support of learners when viewed from an overarching educational perspective.

4.2 RATIONALE FOR EMPIRICAL RESEARCH

Through the researcher's work experience as a learning support therapist and educational psychologist at an independent school and as a member of the IEB Accommodations Panel, the on-going challenges that are associated with the implementation of inclusive education and the urgent need for sustainable, practical means that will make it possible for schools to embrace inclusion have become evident. While the use of accommodations provides an invaluable avenue of support to learners experiencing barriers to learning, that aligns with the principles of inclusive education, accommodations are accompanied by complexities of their own specific nature.

The search of the keywords "accommodation; independent school" did not yield any results in the extensive databases of *EBSCOhost Education Source*, *Taylor and Francis Online Journals* and the *Unisa Institutional Repository* other than the perspective of parents (Cotterell 2015) and the role of principals (Gous, Eloff & Moen 2014). In order to gain greater understanding and insight into accommodations in general, and more specifically the promotion of inclusion by the school psychologist through the use of accommodations in independent high schools, it is necessary to conduct empirical research. Information cannot be attained merely through desktop research but rather demands: onsite collection of data from relevant participants, judicious observations of stakeholders and astute, insightful analysis of the data.

4.3 RESEARCH DESIGN

The research design is a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research (Durrheim 2006:34).

Research designs differ depending on the purpose of the study. While a research design is sometimes taken as a "blueprint", it is noteworthy that with qualitative research, such as this study, the research design is required to be flexible in nature, as

qualitative researchers almost always develop their own aspects of the design as the research progresses (Fouché & Schurink 2011:308; Durrheim 2006:35).

4.3.1 Research paradigm

Paradigms are central to research design. The research paradigm provides a broad framework for research purposes and may serve as a lens or organising principles through which reality is interpreted. The research paradigm impacts on both the nature of the research question and on the manner in which the question is to be studied (Nieuwenhuis 2016a:52; Durrheim 2006:40).

The paradigm which is used for this study stems from an antipositivistic, interpretive approach and in its broadest sense it refers to research that elicits participants' accounts, experiences or perceptions (Fouché & Delpont 2011:65) in accordance with 1.6.7.

4.3.2 Research approach

A qualitative research approach was selected for this study, as it was considered to be best suited for the exploration of the study's research problem. It is an appropriate means for exploring and understanding the meaning that individuals ascribe to the problem and furthermore it lends itself to sensitive collection of data, in a natural setting, and with an open-minded approach to the interpretation of findings (Creswell & Poth 2018:8). These attributes are particularly valued when working on an uncharted research problem, as in this study.

A qualitative research approach is underpinned by the following characteristics (Creswell & Poth 2018:43-44; Nieuwenhuis 2016a:52):

- *A natural setting.* Qualitative research focuses on natural settings where interactions occur.
- *The researcher as key instrument.* Qualitative researchers gather information and collect data themselves.
- *Multiple method.* Qualitative research implies that multiple forms of data are gathered, rather than relying on a single data source.

- *Participants' meaning.* Qualitative research focuses on the meaning that the participants ascribe to a problem and should not be prejudiced by the meaning that the researcher brings to the research or by meanings previously stated in literature.
- *Inductive data analysis.* Qualitative research is underpinned by building patterns, categories and themes that are built from the bottom up. It does not begin with a theory to test or verify.
- *Emergent design.* The qualitative research process is not prescriptive, and may change or shift after the researcher enters the field and begins to collect data.
- *Interpretative enquiry.* Qualitative research is a form of interpretive enquiry, in which the researcher makes an interpretation of what is seen, heard and understood. It is noteworthy that this interpretation cannot be totally separated from the researcher's background (e.g., work experiences, cultural experiences, history).
- *Holistic account.* Qualitative research aims to develop a complex picture and establish a composite view of the problem under study. This encompasses reporting multiple perspectives, identifying the many factors in a situation and outlining the larger picture that emerges.

4.3.3 Research strategy of inquiry

Building on from the selection of the qualitative research approach for the study, the specific research type or strategy of inquiry was determined. The research strategy of inquiry provides specific directions for procedures in a research design (Creswell & Poth 2018:8).

For the purpose of this study, a two-layered phenomenological research strategy of inquiry was adopted. The two layers consisted of two groups of participants, namely school psychologists and learners who had procured an IEB accommodation and were between Grades 9 and 11. Phenomenological research is a strategy of inquiry in which the researcher identifies the essence of human experience about a phenomenon as described by the participants. It attempts to grasp the participants' perceptions and understanding of a specific situation (Creswell & Poth 2018:20; Delport, Fouche & Schurink 2011:305).

Thereafter, the phenomenological research efforts focus on developing a composite description of the individual participant's experiences. In keeping with the

phenomenological research strategy of inquiry, the researchers are required to be aware of the need to distance themselves from their own personal biases and preconceptions regarding their participants' experiences (Nieuwenhuis 2016b:77-78; Fouche & Schurink 2011:316-317).

4.4 RESEARCH METHODS

Research methods are a major element in the framework of research, and they involve the procedures that researchers used in collecting data, analysing, describing and explaining phenomena (Nieuwenhuis 2016a:51).

For the purpose of this study, the research methods used are aligned with the qualitative research approach.

4.4.1 Selection of participants

Flowing from 1.3, the study population comprised firstly, learners —male and female— who, through their initial application, procured an IEB accommodation or IEB accommodations and were in Grades 9 to 11. The focus of the accommodations relates to word reading accuracy, reading rate or fluency, reading comprehension, dyslexia, aphasia, spelling accuracy, clarity or organisation of written expression and writing rate. Secondly, the study population included HPCSA registered psychologists in independent high schools that were actively involved with the accommodation application process, implementation of accommodations and associated support of the learners. The selection of research participants from an entire population is known as sampling. It involves decisions about which people, settings, events, behaviours and or social processes to observe. A major tenet of sampling is to select a sample that is representative of the population about which the researcher aims to draw conclusions (Durrheim 2006:49).

Stratified random sampling, in addition to purposeful sampling methods, was used in the study. Stratified random sampling was used to initially determine the school sites. In the stratified random method of sampling the population is divided into a number of groups called strata. The strata in this study were formed on the basis of natural subgroups; namely the provinces in South Africa. In terms of allocation of sample size to the strata,

proportional allocation was adhered to. In using proportional allocation, the number allocated to each stratum was proportional to its population size, for instance larger samples were drawn from larger strata and smaller samples from smaller strata (see Figure 4.1). Selection of the school sites within the different strata occurred randomly, however in accordance with stratified random sampling principles, known information about the population was used prior to sampling in order to make the sampling process more efficient (Maree & Pietersen 2016:195-196; Strydom 2011c:230). To this end, the researcher randomly selected the school sites against the background knowledge, acquired by the researcher's general association with independent high schools over several years as a learning support therapist and later as an educational psychologist, to include six independent high schools that employ school psychologists and have adopted the inclusive practice of accommodations.

With regard to the independent high schools' population sample size, in 2019 there were 251 schools registered with the IEB. 122 schools are based in Gauteng, 39 schools are based in KwaZulu-Natal, while there are 22 IEB registered schools in the Western Cape and 16 in the Eastern Cape. Six schools in the Free State are registered with the IEB, while in Limpopo 14 schools are registered with the IEB. In Mpumalanga and North West there are seven schools respectively that are registered with the IEB. The remaining schools registered with the IEB are in Swaziland, Mozambique and Namibia (Mowatt 2019). Thus in accordance with the stratified random method of sampling and proportional allocation, three schools from Gauteng were selected for the study while one school was selected from each of the following provinces: KwaZulu-Natal, Western Cape and Eastern Cape as shown in Figure 4.1. Permission from the IEB Chief Executive Officer was attained to allow the researcher entrance to the selected schools. Details of this document are included in Appendix 3.

Following the selection of the schools, the researcher then contacted the individual school principals via email. If there was no reply to the email after a two-week period, then a reminder was sent. If after a further week there was no response to the reminder, then a school principal from another school, within the same province, was approached. The school principals that agreed to take part in the study were required to complete an informed permission document and a separate confidentiality agreement pertaining to the sampling selection. Details of these documents are included in Appendices 4 and 5.



Purposeful sampling applying stratified random sampling with geographical perspective			
			
Strata of registered IEB schools: Geographical area - number	Number of selected schools per stratum	Number of school psychologist participants	Number of learner participants
Gauteng - 122	3	$1 \times 3 = 3$	$2 \times 3 = 6$
KwaZulu Natal - 39	1	1	2
Western Cape - 22	1	1	2
Eastern Cape - 16	1	1	2
Free State - 6			
Limpopo - 14			
Mpumalanga - 7			
North West - 7			
Swaziland, Mozambique & Namibia - 18			
Total: 251	6	6	12

Figure 4.1 Stratified sampling of school sites

Purposeful sampling was used to determine the learner and school psychologist participants. Purposeful sampling means that the sampling depends not only on availability and willingness to participate, but that the cases are typical of a specific population (Durrheim & Painter 2006:139). Furthermore, in purposeful sampling it is anticipated that the selected participants will generate rich, detailed information that can best inform the researcher about the research problem under examination and which, in turn, will enable the researcher to gain insight into the research problem and research question (Creswell & Poth 2018:148; Nieuwenhuis 2016b:85; Strydom & Delpont 2011:390-392).

Six school psychologists and twelve learner participants were identified and selected by the school principals by means of purposeful sampling in meeting one of the key requirements to achieve rigour, namely data saturation. School principals are well placed for meaningful involvement in the study, as they are typically the driving force

behind the embracement of inclusive education and are pivotal in managing and motivating the paradigm shift that is necessary to transform schools into being inclusive. The school principals' overarching involvement in inclusivity thus encompasses an understanding of inclusive tools such as accommodations (Gous et al. 2014:535-552). Moreover, the school principals' suitability for involvement in the identification and selection of participants is heightened by their insight into individual learners and school psychologists at their schools. This knowledge optimised the selection of participants who had the capacity to generate rich, detailed information that best enlightened the researcher about the research problem.

Furthermore, the following underlying criteria were also taken into consideration in determining which school psychologist participants were chosen by the school principals:

- They must be qualified and registered by the HPCSA as a psychologist.
- They must work as a school psychologist at an independent high school.
- They must be involved in the accommodation application process, implementation of accommodations and support of learners with accommodations.

The exclusion criteria were:

- Learners who procured an IEB accommodation or IEB accommodations that were not in Grades 9 to 11.
- Grade 9 to 11 learners who procured an IEB accommodation or IEB accommodations other than accommodations relating to word reading accuracy, reading rate or fluency, reading comprehension, dyslexia, aphasia, spelling accuracy, clarity or organisation of written expression and writing rate.
- School psychologists at independent high schools who were not registered at the HPCSA.
- School psychologists at independent high schools who were not actively involved with the accommodation application process, implementation of accommodations and associated support of the learners.

The selected school psychologists were initially contacted via their school principal. Following this it was requested that the school principals provide the researcher with the

contact details of the school psychologists. This information was documented in the table provided on the reply slip of the permission letter addressed to the school principal. Thereafter, the researcher contacted the school psychologists by email. The school psychologists that agreed to take part in the study were required to complete an informed consent document. Details of this document are included in Appendix 6. If the school psychologist refused participation, then the school principal was asked to nominate a further school psychologist. Appendix 7 contains a summary of the school psychologists' personal details. Details of the nature of the school psychologists' personal details are outlined in Figure 4.2.

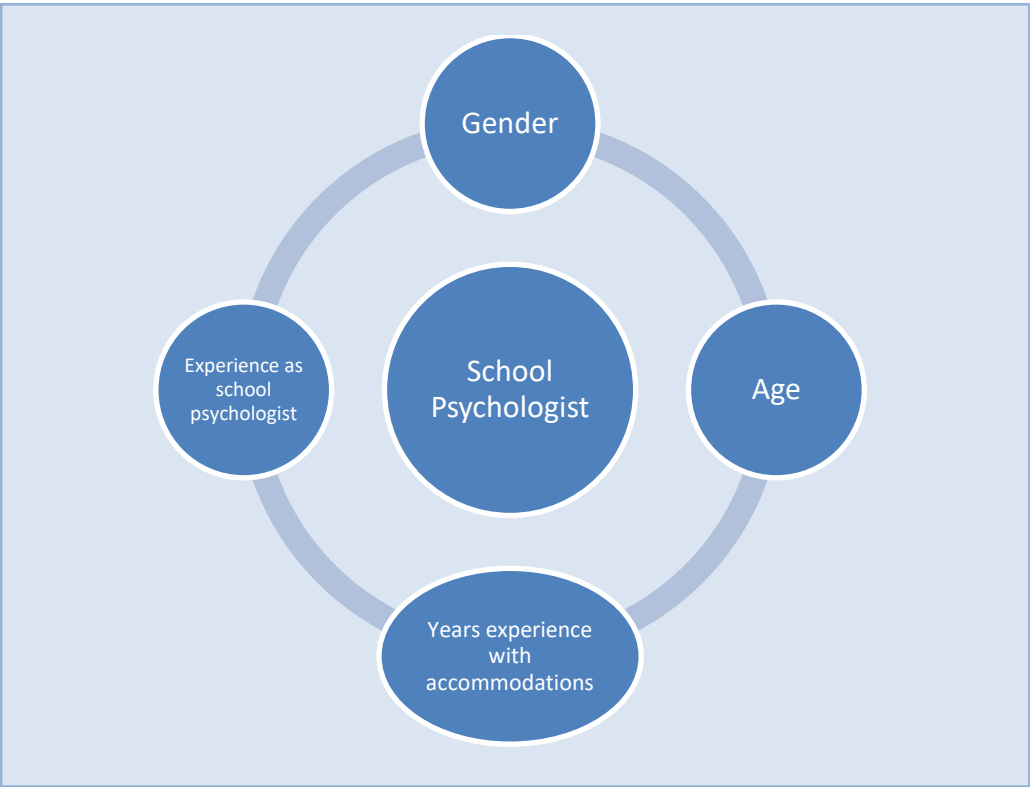


Figure 4.2 Personal particulars of school psychologists who participated in the study

The sample of learner participants comprised twelve learners; two learner participants were selected from each school. The route of contact with the learner participants was multi-dimensional. The researcher initially approached the school principals to request their involvement in the selection of learner participants. The school principals supplied the learner's parents' details to the researcher by means of documenting this information on the table provided below the reply slip of the permission letter addressed to the school principal. Thereafter, the researcher emailed the learner participant's parents to inform them of details of the study and to gain consent for their child to

participate in the study. The learner’s parents provided the learner’s email address to the researcher. The learner participants whose parents consented to their involvement in the study were then contacted by the researcher via email and they were required to complete an assent document. Details of the assent document and the parental consent document are included in Appendices 8 and 9. If the parents or learner refused participation, then this decision was respected, and the school principal was asked to nominate a further learner participant.

It is noteworthy that as the learner participants had secured accommodations from the IEB in one or more of the four major types of accommodations, namely: setting accommodations, scheduling accommodations, and/or presentation accommodations, they typically experienced elements of difficulty in all or some of the following learning areas: reading, spelling and/or written expression. Appendix 10 contains a summary of the learner participants’ personal details. Details of the learner participants’ personal details are outlined in Figure 4.3.

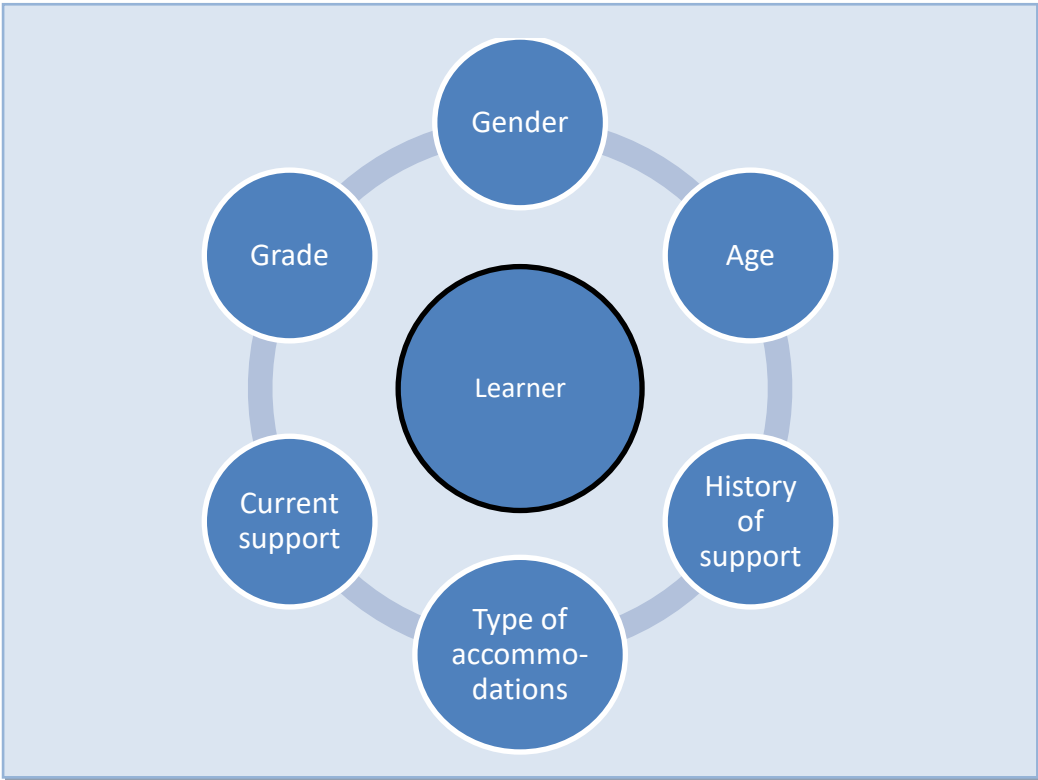


Figure 4.3 Personal particulars of learners who participated in the study

The criteria according to which the learner participants were chosen by the school principal included:

- They must be enrolled at an independent high school.
- They must be adolescents between Grades 9 and 11, from co-educational schools, girls-only schools or boys-only schools. Girls and boys were selected from the co-educational schools while girls were selected from the girls-only schools and boys were selected from the boys-only schools.
- The learners' language of instruction, in both primary and high school, must be English.
- The learners must have been formally granted accommodation/s by the IEB in one or more of the four major areas of accommodations; namely setting, scheduling, presentation or response accommodations.

4.4.2 Data collection

A variety of forms of data collection were used for this study. The data collection methods align with the basic principles of qualitative research and were specifically selected to facilitate collection of rich information.

4.4.2.1 *Semi-structured interviews*

Semi-structured interviews were one of the means of data collection used with the school psychologists and learner participants.

Semi-structured interviews may be defined as interviews that are organised around areas of specific interest, but the interview schedule remains flexible. They afford an opportunity to gain insight into how people think and feel and may also be useful in procuring a detailed picture of participants' beliefs and perceptions (Greef 2011:348; Kelly 2006:297-298). The semi-structured interviews with the school psychologists and learner participants were face-to-face, in-person interviews that were conducted individually. The school principal and school psychologist made available the use of the school psychologist's office, on the school premises, for the purpose of these interviews. These sessions were scheduled after the school day to ensure that they did not interfere with the participants' school commitments. The duration of the semi-structured interview with the individual school psychologist was 30 minutes, while the semi-structured interviews with the individual learner participants lasted 20 minutes each.

During the semi-structured interviews, irrespective of whether the researcher was familiar with the participant or not, the process was typically initiated with an ice-breaker question. The ice-breaker questions varied according to the school psychologist and learner participant that were being interviewed. The function of the ice-breaker question, or small talk, was to create a warm, friendly environment and to put the participants at ease. In essence, the ice-breaker question set the tone for the ensuing semi-structured interview (Greeff 2011:371). Examples of ice-breaker questions used include “It is close to the end of term, what are your plans for the holiday period?” and “I notice that your school blazer has a special coloured trim. Tell me about this.”

The ice-breaker questions were then followed by opened-ended questions that aligned with the sub-questions in the research plan as indicated in section 1.5.2.1. These open-ended questions were selected with the intention of eliciting detailed views and opinions from the participants. According to Kanjee (2006:486), open-ended questions allow respondents to communicate their experiences or opinions about a specific issue in their own words without any restrictions. The researcher was mindful of being attentive to the participants’ responses, and the open-ended questions were followed up with further probing and clarification, where applicable or appropriate (Nieuwenhuis 2016b:93). In conclusion the school psychologists and learner participants were thanked and acknowledged for the time that they had spent with the researcher. Details of the questions, which were aligned with the objectives of the study and were informed by the literature study, are included in Table 4.1.

Table 4.1 Analysis of interview questions in relation to the objective, and literature studies

Participants	Paraphrase of questions		Objective/ Aims of the study 1.5	Literature study (chp 2)	Literature study (chp 3)
Psychologists	1	How did you become aware of accommodations?	possible	x	x
	2	Usefulness of IEB Accommodation Policy documents	x	x	
	3	Usefulness of knowledge of international inclusion policies and accommodation processes	x	x	
	4	Usefulness of knowledge of barriers to learning in dealing with the accommodation process	x		x
	5	Usefulness of possible knowledge of cognitive neuroscience pertaining to barriers to learning	x		x
	6	What kind of accommodations are being used at your school?	x	x	
	7	Support given to learners prior to accommodations being granted	possible		x
	8	Support given to learners after the granting of accommodations	x		x
	9	Prevailing challenges of the accommodation process	x		x
	10	Prevailing advantages of the accommodation process	x		x
	11	Impact of accommodations on learners' academic performance	possible		x
	12	Impact of accommodations on learners' personal development	possible		x
	13	Role of educational psychologist in accommodation process	x		x

Participants	Paraphrase of questions		Objective/ Aims of the study 1.5	Literature study (chp 2)	Literature study (chp 3)
	14	Proposed changes to current role that educational psychologist plays in accommodation process	x		
	15	Envisaged improvements to accommodation process	x		
	16	Parents' views, conveyed to educational psychologist, on accommodations	possible		x
	17	Community views, conveyed to educational psychologist, on accommodations	possible		x
Grade 9 to 11 learners with IEB accommodations	1	How did you become aware of accommodations?	possible	x	
	2	What type of accommodations were granted to you by the IEB?	x	x	
	3	What support did you receive prior to accommodations being granted?	possible		x
	4	What support did you receive after the granting of accommodations?	x		x
	5	Prevailing challenges experienced with accommodation process	x		x
	6	Prevailing advantages experienced with accommodation process	x		x
	7	Impact of accommodations from an academic perspective	possible		x
	8	Impact of accommodations from a personal perspective	possible		x
	9	Role of educational psychologist in accommodation process	x		x
	10	Envisaged changes to current role of educational psychologist in accommodation process	x		x
	11	Envisaged improvements to	x		x

Participants	Paraphrase of questions		Objective/ Aims of the study 1.5	Literature study (chp 2)	Literature study (chp 3)
		accommodations process			
	12	Parents' views, conveyed to learners, on accommodations	possible		x
	13	Community views, conveyed to learners, on accommodations	possible		x

With signed consent and assent from the participants, the semi-structured interviews were audio recorded. The use of audio recording was stipulated in all consent and assent letters and the researcher reiterated the reason for using audio recording prior to starting the semi-structured interview with each participant. Audio recording facilitated comprehensive recording of the interview and also allowed the researcher to concentrate on how the interview was proceeding rather than being consumed with the mechanics of note taking. Shortly after the recording, the researcher listened to the recording and thereafter a written transcript of each semi-structured interview was made, by the researcher, for the purpose of data-analysis. Care was taken to ensure that the recordings and transcriptions were undertaken in a meticulous manner (Nieuwenhuis 2016b:94; Greef 2011:359). Appendices 11 to 28 contain transcriptions of the school psychologists' and learner participants' semi-structured interviews.

4.4.2.2 Observation

Observations were also part of the data-collection strategies used for this study. According to Nieuwenhuis (2016b:90), observations involve a systematic process of recording the behavioural patterns of the participants without necessarily questioning or communicating with them. Observations provide an opportunity for the qualitative researcher to gain an in-depth insight into the manifestations of reality and to develop a comprehensive understanding of the phenomenon being observed (Strydom 2011a:330).

With regard to this study, observations that encompassed both verbal and non-verbal behaviour were documented directly after having contact with the six school

psychologists and twelve learner participants during the semi-structured interviewing process.

Recoding of the observations ensued and, in accordance with Nieuwenhuis (2016b:92) in recording observational data, the researcher was aware of the need to capture the following dimensions:

- The date, situation and participant
- The actions observed, which involved a rich description of what actually took place without making any value judgements
- Reflections about what happened, which involved the researcher's own thoughts or ideas about the meaning of what was observed

The observation schedules outlined by Nieuwenhuis (2016b:92) and Creswell & Poth (2018:168) were used as guidelines in designing a specific observation schedule. The generated observation schedule was used for both the school psychologists and learner participants. Appendix 29 and Appendix 30 contain details of the observation schedule.

4.4.2.3 Research diary

The research diary was a further form of data collection used in the study. The research diary included the researcher's ideas and insights accumulated during research process. It was useful in that it acted as a filter for possible personal bias and prompted the researcher to critically consider the ideas and insights gained during the study against the patterns emerging from the data (Nieuwenhuis 2016c:114-115). Appendix 31-34 contains snippets of the research diary.

4.4.3 Data analysis

Qualitative data analysis is primarily an inductive process. Inductive analysis means that information is allowed to emerge from the data rather than being imposed on data prior to data collection (Maree 2016b:39; Schurink, Fouche & De Vos 2011:399).

The process of qualitative data analysis is multi-faceted, and it involves: organising the data, conducting a preliminary read-through of the collected data, coding and organising

themes, representing that data and making an interpretation of the larger meaning of the data (Creswell & Poth 2018:181).

Qualitative data analysis is often non-linear in its essence and the analysis processes are intertwined (Nieuwenhuis 2016c:109-110). As outlined in Figure 4.4, the bedrock of qualitative data analysis typically involves three interlinked, cyclical elements. They include: noticing, collecting and reflecting (thinking about ...).

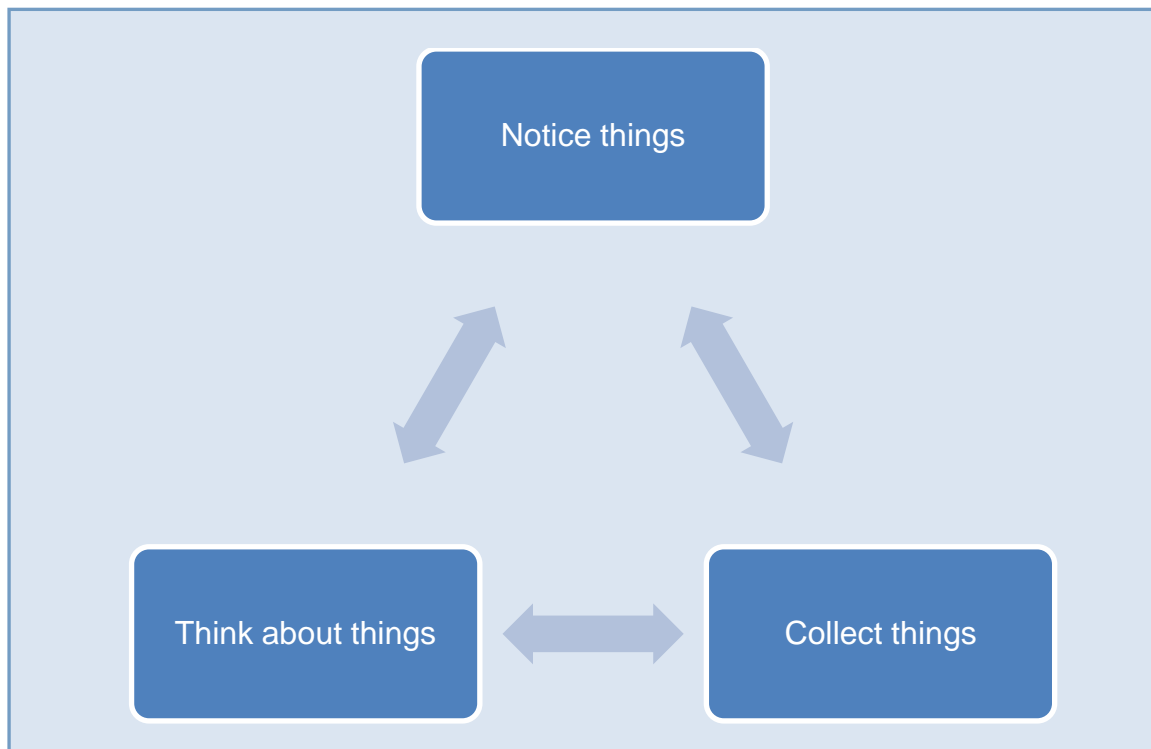


Figure 4.4 An interlinked, cyclic data analysis process

Source: Nieuwenhuis (2016c:110)

For the purposes of this study, building on from the basic foundational premise of qualitative data being underpinned by interlinked cyclical principles or a spiral principle, a more linear practical approach to the data analysis was also considered. However, care was taken to treat the itemised steps as a dynamic guideline and not a recipe that needed to be rigidly followed (Creswell & Poth 2018:185; Schurink, Fouche & De Vos 2011:403).

Six basic steps, or loops in the spiral process, that are typically involved in qualitative data analysis, as outlined by Creswell & Poth (2018:185-186) in Figure 4.5, were taken

into account. In keeping with the fluid, emerging nature of qualitative inquiry it was noted that the steps are not absolute (Nieuwenhuis 2016c:114; Schurink et al. 2011:405).

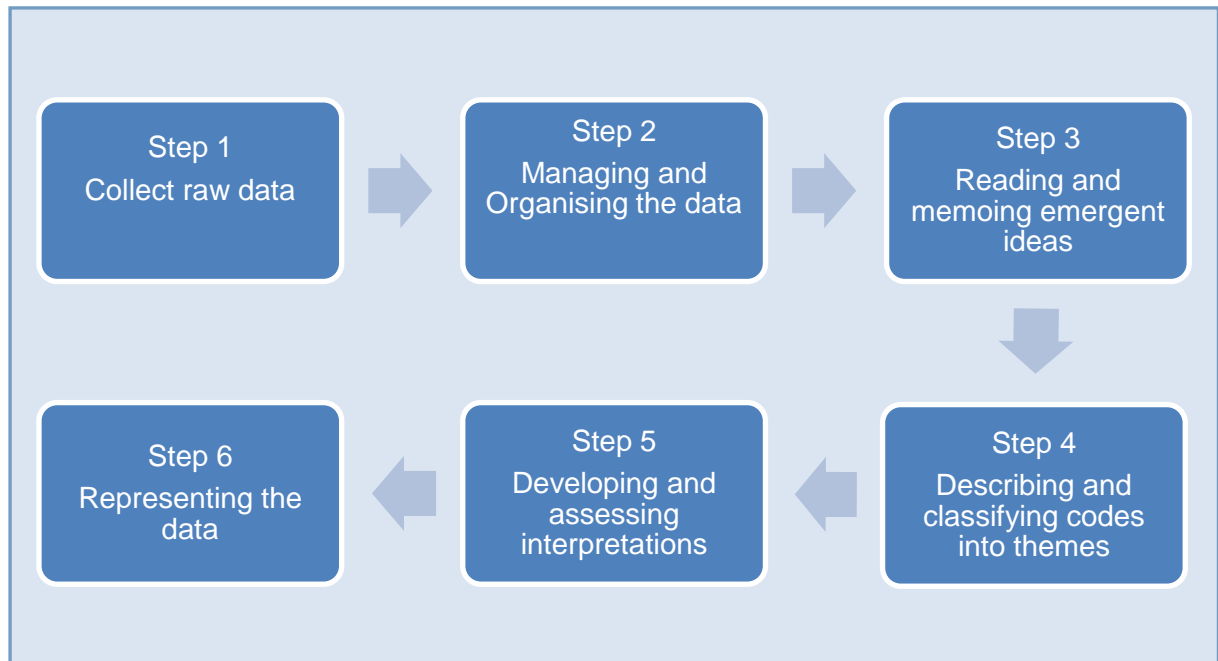


Figure 4.5 The data analysis process

Source: Creswell & Poth (2018:185-186)

Data collection is the initial step of data analysis, as outlined in Figure 4.5. Judicious collection of data by means of semi-structured interviews coupled with the observation and research diary data underpinned the data collection step in this study.

Following collection of data, organisation and preparation of the data for analysis, step 2 of Figure 4.5, occurs. Data generated through qualitative research is voluminous and in order to keep a clear mind and not become overwhelmed by the sheer amount of data collected, a methodical, structured and consistent approach to the organisation and preparation stage of data analysis was required (Nieuwenhuis 2016c:114; Schurink et al. 2011:405). Separate files on the computer were used to gather together the two sets of data, namely from the school psychologist and learner participants. Careful labelling of the material in the files ensued to ensure easy retrieval of the data when necessary. As per Table 4.2, each participant was given an identifying pseudonym abbreviation and data pertaining to the specific participant was labelled accordingly.

Table 4.2 Summary of pseudonym abbreviations used for school psychologists and learners

School Psychologists: six participants	P1, P2, P3, P4, P5, P6
Learners: twelve participants	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12

Once organisation and preparation of the data had been completed, the next phase in the data analysis process, step 3 in Figure 4.5, was undertaken. This involved reading and rereading the data to obtain a general sense of the whole database and to reflect on its overall meaning. The participants’ general ideas, the tone of the ideas and the impression of the depth and trustworthiness were considered at this point (Creswell & Poth 2018:187). The researcher’s general impressions while working through the data were written in the margin of the transcribed semi-structured interviews. This process of documentation may be termed “memoing”. The ideas to follow up from the transcriptions/memoing notes from each participant’s transcription were later incorporated alongside the researcher’s reflections in the researcher’s diary. A selection of research diary samples is included in Appendices 31-34.

The following step in the data analysis, step 4 in Figure 4.5, involved coding the data. Coding demands a heightened awareness of the data and ultimately allows the researcher to quickly retrieve and examine data with some thematic idea. The process of coding is underpinned by reading carefully through the transcribed data in order to identify salient themes and recurring ideas or language, which are thereafter aggregated into small categories of information. Coding relied on the use of descriptive words which were often a term based on the actual language of the participant or they were unique identifying names (Creswell & Poth 2018:190; Nieuwenhuis 2016c:114-115; Strydom & Delpont 2011:410). Data codes are included in Appendix 35.

Emergent strategies were used when coding. Emergent coding occurs when meaning units are determined following an examination of the data (Nieuwenhuis 2016c:116-117).

Developing and assessing interpretation is itemised as step 5 in Figure 4.5. Interpretation involves making sense of the data and encompasses the lessons learned. It includes making careful consideration about what is meaningful in the patterns,

themes and categories generated by analysis. The interpretation may confirm past information or diverge from it – or may pose new questions that need to be asked (Creswell & Poth 2018:195; Schurink et al. 2011:416).

The final phase in the process of data analysis, step 6 in Figure 4.5, is representing the data in text, tabular or figure form (Creswell & Poth 2018:195). Chapter 5 on data analysis and interpretation starts with the research process, followed by an overview of the data analysis (5.3), an exposition of the data reduction (5.4), the interpretations of the data (5.5) and representation of the data (5.6) that resulted in five themes.

4.4.4 Measures for trustworthiness

The issue of trustworthiness, or authenticity as it may also be termed, is an indispensable element of data analysis. Trustworthiness, in its broadest sense, is based on determining whether the findings and conclusions are accurate and sound. Establishing trustworthiness involves extensive field time, eliciting rich descriptions and establishing a good working relationship between researcher and participants (Creswell & Poth 2018:255; Van der Riet & Durrheim 2006:90).

According to Creswell and Poth (2018:259-263), the following strategies enhance the trustworthiness of qualitative research. These strategies were embraced in the study:

- Information was gathered from several participants.
- Prolonged engagement and persistent observation should be spent in the field. To this end, the researcher spent as much time in the field as was feasible.
- Thick, rich descriptions of the phenomena under study were used to convey the findings.
- Member checking or seeking participant feedback was used to determine the accuracy and credibility of the qualitative findings. This was done by emailing a summary of the findings to the participants to determine whether the participants considered the findings to be accurate. Thereafter, the participants were required to respond to the researcher, via email, as to the accuracy of the summary.
- The researcher's potential personal bias and steps taken to minimise the bias were clarified. To this end, the researcher disclosed personal background and work experiences at the outset of engagement with the participants. The use of an

observation schedule and researcher's diary were additional steps taken to minimise potential personal bias.

- Contradictory information or disconfirming evidence that runs counter to the themes was acknowledged and presented.

4.4.5 Ethical measures

Ethical practices are embedded in the entire research process and involve much more than merely following a set of static ethical guidelines (Creswell & Poth 2018:54). Ideally ethical considerations are a constant overarching principle of the research and underpin the formulation of the research problem, data collection, data analysis and report writing process.

4.4.5.1 Ethical issues in the research problem

The research problem was considered from an ethical perspective. Under the umbrella of ethical consideration, the research problem was specifically selected, as investigation of the problem has the potential to extend the knowledge base and be of benefit to the participants as well as the researcher and the wider community.

It is envisaged that outcomes from the study may assist school psychologists in their support of learners experiencing barriers to learning. Through supportive interventions, learners may, in turn, work to full potential at school, which may facilitate their optimum engagement within the varying contexts of their environment.

Furthermore, research that is structured on the bedrock of sound ethical consideration may add value to the existing knowledge base and thereafter engender greater awareness of the school psychologist's potential to embrace and foster inclusion and ultimately may inspire further research within the field.

4.4.5.2 Ethical issues in data collection

As adults and minors were involved in this study, unique ethical procedures were considered to ensure that the research would bring no harm to the participants and that

data was never attained at the expense of the well-being of a human being (Strydom 2011b:113).

Ethical procedures were adhered to throughout the data collection phase. At the outset, the research plan was reviewed by Unisa and ethical clearance was obtained and is included in Appendix 1. Thereafter permission from the IEB Chief Executive Officer was attained. Following this, contact was made with the “gatekeepers”. A gatekeeper is regarded as the individual with the formal or informal authority to provide approval for access to research groups, sites or participants (Fouché & Schurink 2011:325). The gatekeepers were the parents as well as the school principals of the designated schools. The aim and purpose of the proposed investigation, the expected procedures including data collection methods and recording of data, planned participation and the envisaged purpose of the planned investigation were conveyed via email to the parents and school principals and the gaining of written informed permission and consent of the gatekeeper participants was addressed. Thereafter, gaining of informed consent and assent from the school psychologist participants and learner participants was undertaken.

In accordance with the ethnicity of data collection, the following key principles that underpin informed consent were adhered to (Creswell & Poth 2018:155; Wassenaar 2006:72):

- Identification of the researcher was undertaken. As the researcher is known to some of the participants, the role of the researcher was clarified to minimise the possibility of role confusion.
- Efforts were taken to ensure that the participants had a full understanding of the general purpose of the study.
- The expected duration of the participants’ involvement was outlined.
- The fact that no monetary gain was awarded for participation in the study was stated.
- Notation of possible risks associated with participants was undertaken.
- Measures taken to protect confidentiality of the participants were outlined.
- Participants were assured of the voluntariness of participation and freedom to withdraw after from the study at any time.

- Discomfort to the participants was not envisaged but the possibility of learners experiencing flashbacks to earlier achievement difficulties, prior to being granted accommodation, was kept in mind. The possibility of school psychologists experiencing discomfort in the recall of their involvement in the accommodation process was also considered. Provision of names of a person or organisations to contact, should the need for debriefing occur, was undertaken. Debriefing affords the participants an opportunity, after the study, to work through their experiences and have their questions answered and to rectify possible misconceptions (Strydom 2011b:122). The contact details of a practising psychologist and Unisa Counselling Centre (012 441 5509) in Pretoria and LifeLine (011 728 1331) in Johannesburg were provided to participants.
- Signed permission from the IEB Chief Executive Officer and school principals was procured. Signed consent was also attained from the parents and school psychologists. Signed assent from the learners was obtained.

4.4.5.3 Ethical issues in data analysis

The ethical issues that were considered during data analysis were initially focused around the area of confidentiality and protection of the participants' identity (Maree 2016:44). In keeping with upholding respect of the privacy of participants and for the purpose of confidentiality when analysing data, the researcher typically disassociates names from responses during the coding and recording process (Creswell & Poth 2018:55-57). In this study, the pseudonym abbreviations itemised in Table 4.3 were used to uphold confidentiality.

With regard to ethical confidentiality, considerations of the semi-structured interviews, the recordings and transcriptions of the interviews were undertaken solely by the researcher. The recordings were saved to a password-protected external hard drive and memory card; which was stored in a locked steel cabinet in the researcher's office. After a period of five years, all recordings will be permanently deleted from both the external hard drive and the memory card by using an appropriate software program. The transcriptions, observation schedules and the research diary were stored on an external hard drive and a computer which is password protected and has applicable anti-virus protection that is automatically updated. Hard copies of the transcriptions will be stored in a locked filing cabinet in the researcher's office for a period of five years.

When the five-year period has lapsed, the above-mentioned hard copies will be shredded, and the transcriptions permanently deleted from both the computer and the hard drive by using an applicable software program.

In adherence to ethical principles, the accuracy of the analysed data was also considered. This resonates with “trustworthiness” as discussed in section 4.4.4, and member checking of the accuracy of the interpretation of the information was implemented (Creswell & Poth 2018:261). Member checking was done via email communication with the individual participants. A summary of the findings was sent to the participants and the participants were required to respond, via email, as to the accuracy of the summary. Furthermore, the researcher was cognisant of the need to report multiple perspectives and a complex picture of the central phenomenon. In order to achieve this, it was necessary to also report contrary findings (Creswell & Poth 2018:57).

The possibility of researcher’s bias was also considered in an endeavour to adhere to the overarching ethical principles of the study during data analysis. The use of an observation schedule facilitated structured, impartial observations. Furthermore, the use of a researcher’s diary, which includes the researcher’s ideas and insights accumulated during the research process, served as check for subjectivity and researcher bias during the data analysis process (Nieuwenhuis 2016c:114-115).

4.4.5.4 Ethical issues in writing the report

Ethical issues do not end with data collection and analysis; they apply as well to the actual writing and distribution of the findings. According to Creswell and Poth (2018:57) and Strydom (2011b:126), the form of report writing should not use language that is biased against persons because of gender, sexual orientation, racial or ethnical group, disability or age. Furthermore, the writing should communicate an accurate, unambiguous account of the information and the results should not be manipulated by suppressing or falsifying the findings to meet a researcher’s needs. Reports should not disclose information that will potentially harm participants in the present or in the future. Release and distribution of the findings should occur in such a manner that access and utilisation by others is encouraged, as this is ultimately a goal of the research.

In adherence to ethical principles, feedback of the findings of the study was communicated to the persons involved in the study. The findings were summarised in a written report and this was sent via email to the IEB Chief Executive Officer, the school principals, the school psychologists, and to the learner participants and their parents. The researcher's and the research supervisor's contact details were made available to address any questions pertaining to the findings of the study.

4.5 SUMMARY

The study is an exploration of ways in which the school psychologist may promote inclusive education through the use of accommodations in independent high schools. The research follows the qualitative paradigm using phenomenological methodology. The research base for promotion of inclusion through accommodations is relatively new in South Africa and in keeping with the need to conduct research, as mentioned in section 1.2.2, the data gathered is considered useful. The findings and discussion of the data follow in the next chapter.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

This chapter provides the data analysis and interpretation in respect of the research question:

“How can the educational psychologist promote the development of inclusive education through accommodations in South African independent high schools?”

Fundamental to the data analysis and interpretation process was the information procured from the following research sub-questions:

- What policies underpin inclusion and accommodations in independent high schools?
- What is the nature of accommodations available to independent high school learners?
- What are the school psychologist’s perceptions of the use of accommodations in independent high schools in general?
- What support may the school psychologist provide to learners who require accommodations?
- What are the learner’s perceptions of the use of accommodations independent high schools?

The data analysis and interpretation process form the bedrock of the qualitative research approach that was used in the study and it entailed a two-layered phenomenal research strategy of inquiry. As discussed in section 4.3.3, the two layers consisted of two groups: school psychologists who were involved in the IEB accommodation process at school, and learners between Grades 9 and 11 who had procured IEB accommodations. Stratified random sampling was used to determine the school sites. Purposeful sampling was used to determine the learner and school psychologist participants and six school psychologists, and twelve learners were selected for the

study. Data was collected from the participants by means of semi-structured interviews and observations.

The data was analysed and interpreted against the backdrop of the literature review conducted in Chapters 2 and 3. The sections below on data analysis and interpretation start with the research process, followed by an overview of the data analysis (5.3), an exposition of the data reduction (5.4), the interpretations of the data (5.5) and representation of the data (5.6) that resulted in five themes. As stated by McMillan and Schumacher (2010:322), the researcher involved herself in the specific context of the study while maintaining disciplined subjectivity and silencing her own voice (see 1.2.1). The researcher adopted an external frame of reference (Venter 2016:33) in an attempt to relate to the participants, to enter their life-worlds, to accurately hear their narratives and to accurately observe their non-verbal communication.

5.2 RESEARCH PROCESS

The course taken during the research process and the researcher's impressions are included below.

From the outset the research process was underpinned by ethical principles. Ethical clearance was attained from Unisa. Thereafter, permission from the IEB Chief Executive Officer and the school principals was attained. Following this, signed consent was procured from the school psychologists and parents. Signed assent from the learners was attained.

Three schools from Gauteng, one school from the Western Cape, one school from the Eastern Cape and one school from KwaZulu-Natal were selected for the study, that is six in total (see Figure 4.1). Two co-educational schools, two boys-only schools and two girls-only schools were involved in the study.

Six school psychologists and twelve learners were selected for the study and, as mentioned previously, school principals were required to consent to the research. The school principals, school psychologists and learners varied in their response time to the invitation to be involved in the research. However, all time frames were manageable, and care was taken to maintain a patient and considerate approach to individual

workloads and personal schedules. Four of the school principals responded immediately to the invitation. The response from one school principal was delayed as he was on sabbatical and when he returned to school he was faced with a high load of emails. A reminder email was sent, in this case, and thereafter consent was procured. Another school principal acknowledged the invitation timeously but took a while to consent as she was busy with end of year (2019) school commitments and did not have spare time to attend to the details of my request. A month later, at the start of the new term and new calendar year, I sent a reminder email and she consented to the requested involvement in the research.

With regard to the parents, all except two parents responded within two weeks of receiving the invitation. One parent was overseas on business and responded on return to South Africa. Another parent took over two weeks to respond and, in this case, a busy lifestyle appeared to be the reason for the slight delay. In one instance, the mother of the learner is deceased, so consent was attained solely from the learner's father. Assent from the learners was attained within the same time frame as consent from the parents. Questions regarding confidentiality and anonymity of the learner were received and replied to, via email, from one parent prior to the signing of the consent form.

The dates and times for the interviews were set in consultation with the researcher, school psychologists, parents, and learners. The dates and times of the interviews were communicated to all involved parties via email. With the exception of one learner, all the interviews took place at the scheduled times. The one learner's scheduled interview was changed due to the learner's concern that the scheduled appointment time might make her late for her diving lesson. The appointment was rescheduled for the following day when she had no diving lesson.

The school psychologists varied in age and years of experience. With regard to age, there was a 29-year variance from the oldest to the youngest school psychologist, while their years of experience as a school psychologist varied from 25 years to 5 years and their years of experience with accommodations ranged from 10 years to 3 years. It is noted that two of the school psychologists had less than five years of involvement with accommodations. Details of the nature of the school psychologist's personal details are outlined in Table 5.1.

Table 5.1 Summary of the school psychologist's personal details

School psychologist pseudonym	Gender	Age	Years of experience as a school psychologist	Years of involvement with accommodations
P1	Female	39 years	5 years	4 years
P2	Female	32 years	10 years	10 years
P3	Female	59 years	25 years	7 years
P4	Female	30 years	6 years	3 years
P5	Female	35 years	6 years	6 years
P6	Female	47 years	7 years	7 years

With regard to the twelve learner participants, six boys and six girls were selected in total. Three learners from Grade 9 were included in the study, while five learners from Grade 10 and four learners from Grade 11 completed the learner participant sample. The learners' ages ranged from 14 years to 17 years. The learners' personal details are presented in Table 5.2. In accordance with the selection criteria in section 1.7, the learners had secured accommodations in one or more of the following areas: setting, scheduling, presentation or response. The focus of accommodations relates to word reading accuracy, reading rate or fluency and reading comprehension (section 3.2), dyslexia (section 3.2.4), aphasia (section 3.2.3) and spelling accuracy, clarity or organisation of written expression and writing rate (section 3.3).

Table 5.2 Summary of learners' personal details

Pseudo-nyms	Gender	Age	Grade	History of supportive interventions	Types of accommodations granted by IEB	Current supportive interventions
L1	Female	14y	9	<ul style="list-style-type: none"> - Informal accommodations: reader, spelling, time - Fulltime placement at Remedial Primary School 	<ul style="list-style-type: none"> - Additional time - FAL exemption - Reader - Separate venue - Spelling 	<ul style="list-style-type: none"> - Extra maths lessons
L2	Female	16y	9	<ul style="list-style-type: none"> - Occupational therapy - Speech therapy - Remedial therapy - Individual tutor 	<ul style="list-style-type: none"> - Additional time - FAL exemption - Reader - Separate venue - Spelling 	<ul style="list-style-type: none"> - Academic support at school when needed
L3	Male	14y	9	<ul style="list-style-type: none"> - School support across the curriculum 	<ul style="list-style-type: none"> - Additional time - Reader - Scribe - Separate venue 	<ul style="list-style-type: none"> - Private tutor 4 or 5 x's week for concept consolidation
L4	Male	17y	11	<ul style="list-style-type: none"> - Fulltime placement in small inclusive school. 	<ul style="list-style-type: none"> - Additional time - Computer - Separate venue 	<ul style="list-style-type: none"> - Support from individual teachers when needed
L5	Female	16y	10	<ul style="list-style-type: none"> - Identified as dyslexic in primary school. - Informal accommodations in Primary School: Reader and additional time 	<ul style="list-style-type: none"> - Additional time - FAL exemption - Scribe - Separate Venue 	<ul style="list-style-type: none"> - Extra maths lessons
L6	Male	17y	11	<ul style="list-style-type: none"> - Speech therapy - Occupational therapy - Remedial therapy 	<ul style="list-style-type: none"> - Additional time - Separate venue 	<ul style="list-style-type: none"> - Parental tutoring
L7	Male	16y	11	<ul style="list-style-type: none"> - Informal accommodations in Primary School: Reader and additional time - Study skills 	<ul style="list-style-type: none"> - Additional time - FAL exemption - Reader - Scribe - Separate venue 	<ul style="list-style-type: none"> - Private tutor for English
L8	Male	16y	10	<ul style="list-style-type: none"> - Informal accommodations in Primary School: additional time, reader, scribe - Study skills 	<ul style="list-style-type: none"> - Additional time - Reader 	<ul style="list-style-type: none"> - Private tutor for maths

Pseudo-nyms	Gender	Age	Grade	History of supportive interventions	Types of accommodations granted by IEB	Current supportive interventions
L9	Female	16y	10	<ul style="list-style-type: none"> - Extra Maths lessons - Reading and spelling support at external Language Support Centre - Informal accommodations in Primary School, reader, separate venue 	<ul style="list-style-type: none"> - Additional time - Reader - Separate Venue 	<ul style="list-style-type: none"> - Academic support at school
L10	Female	16	10	<ul style="list-style-type: none"> - Reading and spelling support at external reading gym - Individual remedial therapist - Individual tutor 	<ul style="list-style-type: none"> - Additional time - Reader - Spelling 	<ul style="list-style-type: none"> - Private tutor 2x week for Afrikaans and Physical Science
L11	Female	15y	10	<ul style="list-style-type: none"> - Occupational therapy - Speech therapy - Remedial therapy - Extra lessons 	<ul style="list-style-type: none"> - Additional time - Reader - Scribe - Spelling - Separate Venue 	<ul style="list-style-type: none"> - Extra lessons at school - Peer tutoring by matric students
L12	Male	16y	11	<ul style="list-style-type: none"> - Psychotherapy when 5 years old to address hearing loss 	<ul style="list-style-type: none"> - Additional time - FAL exemption (not utilised) - Separate venue 	<ul style="list-style-type: none"> - Support from School Enrichment Centre - Extra lessons Afrikaans - In class support from individual teachers

Data was collected by means of semi-structured interviews (Appendices 11–16), school psychologist participant interviews, and (Appendices 18–28) learner participant interviews conducted at the respective schools and through observations and the use of a research diary. Completion of the semi-structured interviews spanned a 13-week period from the time of gaining initial consent from the school principals to start the research process at one of the six selected schools to the completion of all the school psychologists' and learners' interviews. The interviews at the Gauteng schools were spread over several days to accommodate the school psychologists' and learners' schedules and to align with the researchers work schedule in Johannesburg, Gauteng.

With regard to the selected schools in the Western Cape, Eastern Cape and KwaZulu Natal, the interviews were restricted to a single day per school to limit the researcher's time away from work and travel and lodging expenses. Due to flight schedules, distance from the school to the nearest airport and early morning scheduling of interviews it was necessary for the researcher to spend the night prior to the interviews in the Western Cape and Eastern Cape respectively. An overnight stay was not necessary in KwaZulu-Natal as the interviews started at mid-morning and the short distance from the school to the airport, coupled with the availability of an evening return flight from Durban to Johannesburg, made it possible to complete the interviews within a single day.

With regard to venues for the interviews, the school psychologists allowed me to use their offices for the interviews and in the two instances where this was not possible they arranged for me to have access to an empty classroom. In all cases the interview venues were quiet and private. As outlined in section 4.4.2.1, the school psychologists' and learners' interviews were scheduled for a duration of 30 minutes and 20 minutes, respectively. Without compromising the interview process by resorting to the unsettling habit of clock watching, these time frames were generally adhered to and it was noted that while there was individual variance in the length of the interviews, they were not more than 5 to 6 minutes longer or shorter than anticipated.

The learners did not appear to be unsettled by the audio recording, most probably because they are used to digital recordings on their own devices nowadays. In all instances they were courteous and, in their own individualistic ways, appeared to be engaged and invested with the interview process. The learners' response style varied; while some of the participants' verbal responses were typically brief and succinct, others were more detailed and embellished. In one instance the learner adopted an extremely polite response style, and while this may have simply been the learner's inherent verbal interactive style it is also possible that a level of anxiety may have influenced this communication pattern. A further learner was somewhat measured in her response style. She had experienced several challenges at the outset of her accommodations process and while she was eager to communicate the difficulties that she had faced, she was similarly keen to appear respectful and loyal to her school, and it is possible that this incongruity contributed to her measured approach.

The school psychologists were welcoming and supportive of the research process. Without exception they answered candidly without trying to create false inflated impressions according to the researcher's opinion. Beyond this commonality there was, however, variance in their response style and while there was no evidence of aggression or confrontation, some of the school psychologists were more outspoken and direct in conveying their information, while others adopted a more measured, calm approach to the interview process.

Although no discomfort was noted during the interviews with the learners and school psychologists, emails were sent following the interviews to thank the participants, enquire about their state of mind after the interview and to inform them that feedback would take some time.

There were no technical malfunctions of the recordings of the interviews. The transcribing of the 18 interviews that contain the transcriptions and memoing notes (see section 4.4.3) was time consuming and done by the researcher (see Appendices 11-28). Observations were recorded at the end of the sessions on observation schedules. An example of the observation schedule sheets is included in Appendix 29 and Appendix 30.

5.3 DATA ANALYSIS OVERVIEW

The data analysis process proceeded according to the steps outlined in Figure 4.5. For ease of reference the six steps outlined in Figure 4.5 are addressed in three sections: data reduction, data interpretations and data representations. An overview of this process is included in Figure 5.1

THE DATA ANALYSIS OVERVIEW					
Data reduction		Data interpretations		Data representation	
Step 1	Collect raw data	Step 5	Developing and assessing interpretations	Step 6	Representing the data
Step 2	Managing and organising the data				
Step 3	Reading and memoing emergent ideas				
Step 4	Describing and classifying codes into themes				

Figure 5.1 The data analysis overview

Source: Cresswell & Poth (2018:185-186)

5.4 DATA REDUCTION

As part of the data analysis process, data reduction proceeded according to steps 1-4 in Figure 5.1.

The four steps involved in the data reduction process included:

- Step 1, collection of raw data.
This was done by means of 18 semi-structured interviews and judicious observations. On completion of each interview, observations were hand-recorded on the observation sheets. The recorded interviews were then personally transcribed by the researcher.
- Step 2, managing and organising the data.
Separate files were used to gather the two sets of data, from the interviews with the school psychologists and learners. The files were labelled carefully, using the pseudonyms outlined in Table 4.3, in order to facilitate structured, easy retrieval of data. The observation sheets were scanned and filed in the same manner.
- Step 3, reading and memoing emergent ideas.
The transcriptions were reread several times and memoing notes were recorded in the margins of the 18 individual transcriptions. Thereafter the memoing notes and

the researcher's reflections were incorporated in the researcher's diary. Four samples of the research diary are included in Appendices 31-34.

- Step 4, describing and classifying codes into themes. Through careful examination of the data, meaning units were determined and coded. A summary of the data codes that were used is included in Appendix 35.

Thereafter the coded data was used to determine themes and subthemes (Creswell & Poth 2018:185-186). The themes, subthemes and codes are outlined and presented in Figure 5.2 and included in Appendix 36.

Themes	Subthemes	Codes
Theme 1 Inclusion and accommodation policies	1.1 School psychologist's awareness of inclusion and accommodation policies 1.2 School psychologist's perceptions of the IEB accommodations and exemptions policy 1.3 Challenges experienced with the distribution of the IEB accommodations and exemptions policy 1.4 Limitations of the IEB accommodations and exemptions test battery	UniT IEBP R Int P TB
Theme 2 Types of accommodation	2.1 Types of accommodations accessed at the schools 2.2 Commonly awarded accommodations	TA CA
Theme 3 Advantages and challenges of accommodations according to the school psychologists.	3.1 Advantages of accommodations - Improved academic test results - Improved personal development 3.2 Challenges of accommodations - Physical resources - Financial resources - Human resources - Time resources - Parental pressure - Fairness of accommodations	APD AAR PC FC SC TC PP PC AA
Theme 4 Support provided to learners with accommodations	4.1 The role the school psychologist's knowledge of barriers to learning and cognitive neuroscience plays in shaping support for learners 4.2 School psychologist's role as coordinator of support 4.3 Support from an exosystem context 4.4 Support from the mesosystem and microsystem contexts	BtL CNS LS RP CST CSP CSL CSC CSPs PA IP
Theme 5 Advantages and challenges of accommodations according to learners.	5.1 Advantages of accommodations according to learners - Improved academic test results - Improved personal development 5.2 Challenges of accommodations for learners - Physical resources - Financial resources - Human resources - Time related resources	AcA AAR APD PA NA PC FC SC TC

Figure 5.2 Themes, subthemes and codes

5.5 DATA INTERPRETATIONS

Following the reduction of data, the data was then interpreted according to the themes and subthemes identified in Figure 5.2.

In accordance with Figure 4.5, data interpretation involved Step 5 of the composite data analysis process:

- Step 5, developing and assessing interpretations. As indicated in section 4.4.3, interpretation involves making sense of the data and may confirm past information or diverge from it or may pose new questions that need to be asked (Creswell & Poth 2018:195; Schurink, Fouche & De Vos 2011:416).

5.5.1 Theme 1: Inclusion and accommodation policies

Interpretation of the data included in Theme 1 involves investigating:

- School psychologist's awareness of inclusion and accommodation policies
- School psychologist's perceptions of the IEB accommodations and exemption policy
- Challenges experienced with the distribution of the IEB accommodations and exemptions policy
- Limitations of the IEB accommodations and exemptions test battery

5.5.1.1 Subtheme 1.1: School psychologist's awareness of inclusion and accommodation policies

In section 2.1 it was noted that both inclusion and accommodations are highly context-dependent and thus country-specific legislation and policies have arisen to guide and shape the inclusive process. Furthermore, keeping abreast of international and national trends in inclusive education and accommodations is important in ensuring that these principles are translated into a reality and not relegated to "ideological bandwagon" rhetoric (Bakken et al. 2013:23; Graham & Jahnukainen 2011).

In keeping with the importance that the literature review ascribes to school psychologists having a comprehensive grasp of inclusion and accommodation policies,

data reveals that the school psychologists have an understanding and awareness of South African inclusions and accommodations policies. The origin of this knowledge varied and as communicated by P1 it was, in some cases, attained through university tuition.

So, it was based on my training at university and based on the entire process of becoming an ed psych. (P1)

However, there appears to be disparity in the focus that universities place on inclusion and accommodation policies, as another school psychologist (who falls within the same age range as the above-mentioned school psychologist) communicated that knowledge of accommodations and related policies were not an area of focus during her university training. This void for P4 was, to an extent, filled by later informal training.

In my training we learnt more about getting used to assessments in general rather than accommodations. So that was a huge gap. And then when I was an intern, afterwards, we asked if there was someone who could come in and help us train in accommodations. (P4)

In one instance, possibly due to the school psychologist being trained prior to the implementation of accommodations in IEB High schools, knowledge of accommodations was founded on practical experience with accommodations at a school level and through on-going upskilling via informal support groups.

At my previous school as we became a high school it became very relevant, so that is when I started getting into it and then through my reading group. (P3)

With regard to the accommodation policies, P2 raised a salient point that embraces the need for all school psychologists and external assessing psychologists involved in the accommodation process to have current comprehensive updated knowledge of the *IEB Policy and Procedures: Accommodations and Exemptions* (2018) by means of training.

I think that it would be helpful for the IEB to have training on their policy not only for schools but external psychologists as well. (P2)

In contrast to the school psychologists' general awareness of South African inclusion and accommodation policies, they demonstrated limited insight into international inclusion and accommodation policies. This may be a limiting factor in their role of support to learners with accommodations, as in accordance with section 2.1, inclusive education, including accommodations, has not developed in a vacuum in South African and cannot be studied without consideration of international legislation and policies (Swart & Pettipher 2019:18-19).

Data revealed that some school psychologists have no knowledge of international policies, while other school psychologists do have practical knowledge of international accommodations. This hands-on knowledge is based on involvement with the British Cambridge schooling system, that runs concurrently at some schools, or through contact with learners from abroad.

We have got some kids doing Cambridge level but that (accommodation process) is quite easy. (P6)

I have had a few kids that either come from British schools or American schools. They are very similar with the WISC and slightly different when it comes to the scholastic, but in terms of the process (accommodations) it is very, very similar. (P3)

The school psychologists' responses regarding national and international accommodation and inclusion policies highlight the need for on-going focus on these areas during university training and furthermore confirm the importance of continued professional development for all school psychologists.

5.5.1.2 Subtheme 1.2: School psychologists' perceptions of the IEB accommodations and exemptions policy

As school psychologists are fundamental agents in the promotion of inclusion through the use of accommodation in independent high schools, their understanding, and ideally acceptance, of the *IEB Policy and Procedures: Accommodations and Exemptions* is important (IEB 2018).

Data revealed that the school psychologists are generally positive and accepting with regard to the *IEB Policy and Procedures: Accommodations and Exemptions* document (IEB 2018).

I think that in many ways, it's become the standard that I live by when it comes to accommodations. I find the IEB documentation very useful. (P3)

I find the policy very useful. What is helpful for me is to have a policy that is external to the school that I can refer to. (P2)

I think that it is quite user friendly. (P6)

I find the policy with the IEB fair. (P5)

5.5.1.3 Subtheme 1.3: Challenges experienced with the distribution of the IEB accommodations policy

However, the process involved in the distribution of the *IEB Policy and Procedures: Accommodations and Exemptions* documents is not faultless, and data revealed that the policy is not easily accessible and furthermore updates of the policy are released erratically by the IEB.

I have to check whether it is updated. So, I do keep asking, I either ask the IEB directly or I ask friends, because one year I was caught out, I didn't know that it had been updated. (P3)

I think that it is quite difficult when you don't know when it is going to come out. And last year, I think that it was twice in one year and it's hard to keep track of. (P2)

Difficulties with the distribution of the *IEB Policy and Procedures: Accommodations and Exemptions* documents raises the question of the need for the IEB Accommodations Panel to review their current approach to distribution methods and timing of the release of this document (IEB 2018).

5.5.1.4 Subtheme 1.4: Limitations of the IEB accommodations and exemptions test battery

Limitations of the prescribed IEB assessment tools are outlined in section 2.4 and in concurrence with the literature review, limitations of the assessment tools were evident in the data. The limitations of the South African intellectual assessment SSAIS–R are cited by a school psychologist as an area of concern and the lack of information yielded from the SSAIS–R was central to this concern. The limitations outlined may be related to inherent shortcomings of the test, as the test norms are outdated and its standardisation did not include black learners or learners attending independent or special schools (Cockcroft 2013:52).

P3's concerns regarding the limitations of the test are captured in the following statement.

With the intellectual I have a problem ethically when the SSAIS has been used and I know that I can get more from the WISC, like the processing speed. (P3).

With further regard to the test selection, data indicates that the Wechsler international intellectual tests are well accepted by the school psychologists, but the use of the international Edinburgh Reading Test was flagged as a concern. The potential limitations of the international tests not being standardised or adapted for the South African context, as outlined in section 2.4, was not specifically mentioned as the shortcoming of this test, but concern was raised regarding the reliability of its usage with learners with significant reading disorders. According to P3, learners confirmed as experiencing barriers to learning in reading attain high-test performances on the Edinburgh Reading Test that do not correlate with their barriers to learning. P3 raised her concern in the following statement.

In terms of the assessment we are hoping they will update some of it like the Edinburgh. I worry about that because of the kids that I am seeing. I track lots of kids that are in the dyslexia realm and a lot of them do so well on this test, but I know they are not functioning. (P3)

Concerns regarding the need for the IEB test battery to be updated, with regard to the Edinburgh Reading Test, were also stated by P3 at the conclusion of her interview.

My only thing now is the Edinburgh and what we could do instead, what to replace it with. (P3)

The data collected from the school psychologists confirms the limitations of some of the prescribed IEB assessment tools and highlights the importance that ethical and insightful consideration of the review of IEB assessment test battery be upheld.

5.5.2 Theme 2: Types of accommodation

According to the school psychologists and learners, a wide range of accommodations are being implemented at school. Interpretation of the data included in Theme 2 involves:

- Types of accommodations accessed at the schools
- Commonly awarded accommodations

5.5.2.1 Subtheme 2.1: Types of accommodations accessed at the schools

Data indicates that the types of accommodations being used by the participant learners conforms with the four major kinds of accommodations identified in the literature review by Bolt and Roach (2009:43), namely settings, scheduling, presentations and response accommodations. As mentioned in section 2.5, the accommodations are made on a case-by-case basis and meet the learner's unique needs (Goh 2004:39).

Furthermore, the accommodations being used by the participant learners align with those outlined in the *IEB Policy and Procedures: Accommodations and Exemptions* and include: additional time, computer, reader, scribe, separate venue, spelling and First Additional Language exemption (IEB 2018).

Psychologists P5 and P6 discussed the broad spectrum of accommodations that are implemented at their schools, and it is noteworthy that these extend beyond the accommodations used by the learner participants of this study.

We've got extra time, spelling, separate venues, use of computers, amanuensis, rest breaks, First Additional Language exemption and somebody with food intake because of diabetes. (P6)

We have a lot of anxiety and extra time and then around slow reading speed we have readers and so obviously we have spelling accommodations and separate venues. And then we also have rest breaks and we also have a diabetic with food intake. (P5)

5.5.2.2 Subtheme 2.2: Commonly awarded accommodations

In keeping with Goh (2004:43), P2 and P3 indicated that they consider additional time to be the most frequently awarded accommodation at their workplace.

The most used accommodation is time, we have also got separate venues, readers, rest breaks and computer. (P2)

I think time is the most common. (P3)

However, P1 found that due to a high prevalence of anxiety and attention difficulties within her school's specific body of learners, a separate venue accommodation is the most prevalent accommodation award.

I would say separate venues are the most used accommodations. So, in alignment with symptoms related to anxiety disorders, there is quite a bit and also for ADHD for concentration difficulties it is there. (P1)

5.5.3 Theme 3: Advantages and challenges of accommodations according to the school psychologists

Data collected from the school psychologists revealed that there are significant advantages related to the accommodation process – and conversely, several challenges were revealed. Interpretation of the data included in Theme 3 involves:

- Advantages of accommodations
- Challenges of accommodations

5.5.3.1 Subtheme 3.1: Advantages of accommodations according to learners

The advantages of accommodations, according to school psychologists, are dealt with in terms of improved academic test results and improved personal developments for the learners.

The improvement in the learners' academic test results, noted in the data, aligns with the findings of the literature review and, as outlined in section 3.5.1.1, the increased test marks may rest on that fact that the implementation of accommodations allows learners that experience barriers to learning the opportunity to work optimally, as their true abilities are no longer shrouded beneath the difficulties that they experience (Alant & Casey 2005:186; Goh 2004:28-33).

The learners' increased opportunity to work to full potential with the implementation of accommodations was acknowledge by P3 and P2.

*She is bright, you know, and now she is able to show off what she is capable of.
(P3)*

I think it has been a huge advantage to have accommodations. You know I have seen some kids who are so bright and so capable but before she wasn't able to actually display her knowledge. (P2)

With regard to specific improvement in academic test results as being an advantage of accommodations, the following affirming statement was made by P1.

For the students themselves it (advantage) is the results. The results speak for themselves. (P1)

P4 supported the sentiments above when she said:

So, there's a few things and the one is definitely academic marks where we do see an improvement in their academic results. (P4)

P6 confirmed the improvement in academic test results that is associated with accommodations as an advantage, but also acknowledged that increased academic performance is typically multi-faceted in origin and may also be underpinned by concurrent comprehensive academic supportive interventions.

The accommodations just give them that extra support and extra edge and you know they are able to do exceptionally well. Last year we had a Matric, severely, severely dyslexic and he arrived here in Grade 8 and we put a tutor and accommodations in place, and he got a BD (Bachelor's Degree) pass. (P6)

Alongside improved academic test results, heightened personal development of the learners, particularly in the area of self-esteem and confidence, was revealed as an observed advantage of accommodations. In the literature review, increased resilience and embodiment of the principles of Positive Psychology, as detailed in section 3.5.1.2, were highlighted as personal advantages of accommodations. While data from the school psychologists indicating improved personal development does not dovetail precisely with resilience and Positive Psychology, they share common ground in as much as for some learners, personal development in the areas of self-esteem and confidence may be forerunners of development of resilience and adoption of a protective, strength-based outlook.

P6 highlighted the learner's personal development in the area of self-esteem as an advantage of accommodations.

Ah you know for me it is just looking at their self-esteem and how that accommodation lifts them. (P6)

Positive personal development aspects of accommodations were affirmed by P1 and P2's comments.

The student's complete perception of themselves has changed. What is so touching is that he said to me, I am not dumb. Like I guess I am not dumb. I am not stupid. (P1)

And you see their confidence change when we implement accommodations. (P2)

5.5.3.2 Subtheme 3.2: Challenges of accommodations for learners

In section 3.5.2 the challenges associated with accommodations were named as: lack of understanding of accommodations, fairness of accommodations, parental involvement, quality of the psychologist or psychometrist's report, cost of the accommodation application process and shortages of staff and venues.

Several of the above-mentioned challenges correlate with the challenges revealed in the research data. In the data, the challenges are reported as follows: physical resource challenges, financial resource challenges, human resource challenges and time resource challenges. Parental pressure and the fairness of accommodations were also considered to be challenging and they are included in the analysis and interpretation. It is noteworthy that, unlike in the literature review, the school psychologists did not note the quality of the psychologist or psychometric report as being a challenge. This is possibly because some of the school psychologists personally conduct the assessment and write the associated report, or alternatively because the school psychologists refer to selected external assessing psychologists that provide the necessary comprehensive reports.

Regarding physical challenges, as previously stated in section 3.5.2.6, the practicality of sourcing and supplying the physical resources associated with accommodation is a very real challenge and is one that has the potential to jeopardise the success of the accommodation process. Physical resource related challenges, in the form of difficulties in procuring separate venues, were included in the data and were personally experienced by P6, P2 and P3.

And then a huge challenge is venues. Finding separate venues where readers and scribes can meet. So, in the exam time we block off the top part of our library as we have three seminar rooms there, so I usually put my Matrics there and

then you just look for little holes everywhere where you can put a reader and a scribe and a child, where it is going to be quiet. (P6)

Our other big challenge is the venues, so we don't have 26 spare offices so at the moment the separate venue girls write in a big room, but I can be quite flexible about their seating. (P2)

They don't easily do separate venues for Grade 8, they just can't! and, they will say they are committed to doing it from Grade 10. (P3)

Financial challenges noted by the school psychologists were evident in the research data. This correlates with the literature review findings discussed in section 3.5.2.5, whereby the onus is on the parents and/or school to meet the costs of a professional report that attests to the learner's barriers to learning (Lockhart Walton 2006:102). The high cost of the psycho-educational assessment was alluded to by P5 and it is noteworthy that in accordance with parents' varying financial status, the cost may be easily absorbed or it may present as a challenge.

Well if you are willing to pay like the R8000.00 that it [psycho-educational assessment: author] is going to cost you, go ahead. We are not going to stop you. (P5)

The financial burden of the cost of implementing some of the accommodations was highlighted as a challenge in the data, and P1 indicated that the cost factor precludes some learners from using their accommodations.

A lot of these kids that do have an accommodation for a scribe, they are not using it because of the cost. It is huge they have already paid us to do the assessment. They are still paying the IEB costs and then they have to pay a scribe for every cycle test and exam. (P1)

Similar financial related challenges were reiterated by P2.

So, amanuensis and private invigilators are at the parent's expense. It's a huge expense for the parents. (P2)

The persistent financial challenges expounded in the data raise the question of how the financial implications of the accommodation assessment and thereafter the implementation of accommodations can be better managed to ensure that “no child is left behind”.

Human resource related challenges in terms of procuring the staffing needed for the accommodations was noted as a challenge in section 3.5.2.6. Data from the school psychologists concurred in observance of this challenge and staffing difficulties, beyond those which are available at school, was noted. P2 communicated that staffing for amanuensis accommodations has been outsourced and is currently borne by an external tutor company, whereas for P6 the required additional human resources required for amanuensis are procured from the local community.

So, for amanuensis I liaise with the company. I train the person and the parents get billed. It's a huge expense for the parents but the parents have bought into it because we don't have staffing. (P2)

We use reader and scribes whom I have done training with. So, they have all been trained and signed contracts and they are mostly retired teachers. (P6)

A further human resource related challenge, which is not mentioned in the literature review but is present in the data, is the heavy administrative load that accommodations typically place on the school psychologists. Administration is draining on the school psychologists' personal human resources and P6 and P3 communicated the following administrative related challenges that they experience in compiling an IEB accommodation application.

Obviously the admin is extensive, you know, getting the relevant forms for the application. (P6)

I volunteered to be the person who would do the application because I had done it before, so I know the process. Sometimes I rue that decision because it is hours of work to get the whole thing together. (P3)

Furthermore, the stress and time-consuming aspects of timetable related tasks, associated with accommodation, are cited as an additional administrative challenge that

is draining on the school psychologist's personal human resources. These challenges are outlined by P6 and P2.

Exam times are stressful. A big challenge is actually getting the timetables for all the boys' exams and then getting every child's individualised programme for their tests. Once this is done then putting in the readers and scribes is relatively easy. (P6)

I think that the biggest challenge for us has been timetables. (P2)

Time resource challenges were further itemised as very real challenges experienced by school psychologists. It is noteworthy that time related challenges were not raised in the literature review, but the school psychologists' conveyance of this challenge in the accommodation process is worthy of mention and future consideration.

Data reveals that the timing of the actual implementation of accommodations is a challenging factor. The timing of the implementation of accommodations is embroiled in physical resource challenges and while the schools involved in the research are able to implement the learners' accommodations for examinations, not all schools are able to implement accommodations in class tests. P4 alludes to the difficulties in implementing all accommodations timeously.

So, our Grade 8 to 10's, we cannot accommodate them for every class test that they write. (P4)

A further timing-related challenge is that in some schools Grade 8 learners experiencing a history of barriers to learning are unable to make formal IEB accommodations applications immediately on entry to Grade 8, as the teachers do not know them well enough to be able to provide the supportive evidence and samples of work that are required from teachers when making an IEB accommodation application. This challenge is outlined by P3.

They are inclined to let the children in Grade 8 flounder for 6 months because they want to get to know the child. And ja, I get that, but I don't think that it is always ok. (P3)

The time-consuming aspect of communicating with and upskilling teachers in order to generate a common understanding of all that accommodations encompass was communicated as another time-related challenge. This challenge goes hand-in-hand with the literature review findings in section 3.5.2.1, in that a lack of understanding about accommodations is an on-going challenge and according to Bolt and Roach (2009:54), while accommodations are not a new inclusive practice, a lack of awareness of accommodations may present as a fundamental challenge. P3's experience of the combined challenges of a lack of understanding of accommodations and demands on time resources are detailed below.

So, I think for me one of the fundamental frustrations is educating about what accommodations means and how you do it and you know this takes time. I have found with teachers that if you show them how to do it they are fine. It is more the fear about how am I going to do this or that. Or how am I going to justify this. (P3)

In the literature review, parental involvement in section 3.5.2.3 was documented as a challenge of accommodations. In keeping with the literature review, parental denial of the learner's barrier to learning was itemised in the data as being a challenge. P6 experienced parental denial as a hinderance in getting the accommodation process started.

So interesting, Grade 8 and most Grade 9 parents don't really support accommodations in a big way. Maybe because they don't know, or they just want their child to fit in and be ok and have a clean start. So, they don't tell everything. (P6)

Conversely, excessive parental pressure to procure accommodations for their children was experienced by P6 from parents with learners in Grade 10 and 11. P2 and P5 also experienced parental pressure as being challenging, but their experience was not limited to parents with children in Grade 10 and 11. Parents' pressure appears to centre around the perception that accommodations may be an avenue for improved academic test results, which may ultimately facilitate university entrance for the child.

I think parents don't always understand. So, sometimes you will get a student who has 80% and they want to push it to 85% and then they will say I need extra

time. But the purpose of accommodations isn't to give your child extra marks to get into medicine, it actually has a function. (P2)

So that anxiety around entrance into varsity and matric results has definitely risen in the past two years in terms of parents wanting their kids to get accommodations. But I see there has been that shift that Grade 11 and 12 parents are like "I want it". (P6)

Marks are a big thing and the requirements for university are very high. It's hard to get in and some parents are like "I've paid for it (accommodation)". (P5)

A further parental related challenge revealed in the data was the expectation of some parents that payment for the IEB accommodation assessment and payment of the application fee guaranteed their child an accommodation. P5 and P1's statement highlights this challenge.

So, I think that the parents are like "I've paid for it"; those are the kind of issues that we deal with. (P5)

I also find that the parents are way too overconfident about the process and they have paid so they expect to get the accommodations. (P1)

Finally, challenges regarding the fairness in the process of awarding accommodations by the IEB Accommodations Panel were raised. This concurs with Goh's (2004:39) earlier mentioned statement, in section 3.5.2.2, in as much as the consistency in allocation of accommodation is an on-going challenge. Overreliance on the test results conveyed in a psycho-educational report is cited as an area of concern in the literature review. P1 and P3 similarly perceive the IEB Accommodation Panel's overemphasis on psycho-educational assessment results, at the expense of holistic consideration, as being a central challenge to the fairness of accommodation awards.

I feel as if only our results are being read and not the actual content of our reports which are extremely detailed, and if we read the entire conceptualisation of each client and the background information they would see the motivation for it (accommodation). (P1)

I think I go through stages when I think shoo, are they reading my report, are they reading the little details that I am putting in there? So, these days I make sure I do my background information as fully as possible and my summary and conclusion. I try and make sure that I really pull it together. (P3)

5.5.4 Theme 4: Support provided to learners with accommodations

As discussed in section 3.4, collaborative broad-based support is what is optimally required for learners with accommodations. Data from the research attests to the school psychologists' pivotal role in providing protective support to learners.

Interpretation of the data in Theme 3 involves:

- The role that the school psychologist's knowledge of barriers to learning and cognitive neuroscience plays in shaping support for learners
- School psychologist's role of coordinator of support
- Support from an exosystem contexts
- Support from the mesosystem and microsystem contexts

5.5.4.1 Subtheme 4.1: The role the school psychologist's knowledge of barriers to learning and cognitive neuroscience plays in shaping support for learners

Barriers to learning and the associated support systems are varied and case specific. With regard to learners' barriers to learning, it is noted in the literature review, in section 3.1, that barriers to learning in reading and written expression underpin the need for several accommodations and it is thus beneficial for the school psychologist to have a working knowledge of the developmental nature of reading and written expression in order to understand the challenges that learners experiencing barriers encounter. An in-depth knowledge of barriers to learning in reading and written expression encompasses an understanding of reading accuracy, reading rate or fluency, reading comprehension, spelling, clarity or organisation of written expression and writing rate.

Furthermore, according to the literature review in section 3.2, an understanding of the cognitive neuroscience associated with barriers to learning in reading and written

expression engenders deeper comprehension of the risk factors and difficulties experienced which, in turn, may foster the development of comprehensive, protective support structures. With regard to reading, as itemised in Figure 3.2, three neural areas, namely the inferior-frontal area including the Broca's area, the parieto-temporal area including the Wernicke area and the occipito-temporal area, are fundamental in the reading process (Shaywitz & Shaywitz 2007:75). With regard to the neural signatures of written expression it is noted that many of the neural resources involved in reading are also involved in spelling (Lombardino 2012:55; Ward 2015:315-316). However, some of the task demands of spelling are reversed to those in reading, as in the reading model grapheme-phoneme conversion is vital, while in the spelling process phoneme-grapheme conversion is key (Ward 2015:311).

The school psychologists were unified in their acknowledgement that a knowledge of barriers to learning and cognitive neuroscience is an important cornerstone of the learners' support programmes. However, they varied in their interest and actual application of this knowledge to the support interventions for learners with accommodation. This variation appeared linked to the actual role that they assume in the accommodation process.

In the case of P2, her knowledge of barriers to learning and cognitive neuroscience appears to be enmeshed with her involvement in devising support structures for learners with accommodations, and she was positive in her acknowledgement of this factor.

... it definitely does guide us. (P2)

It is noteworthy that P2's interest and application of knowledge to the support programme concurs with her portfolio at school. P2 is one of three school psychologists at her school of employment and her role is primarily development of academic support.

And then my role is in academic support, so I have specialised more around kids with learning difficulties and with medical conditions. (P2)

P3 reiterated the pervasive importance that a knowledge of barriers to learning has in shaping support programmes for learners with accommodations and made reference to

the usefulness of the *IEB Policy and Procedures: Accommodations and Exemptions* document that is outlined in Table 2.3 (IEB 2018:4).

I think that it is always something, and I am just thinking of a school that I went to last week. But again just because of the lack of information I could quote from the IEB Policy with regard to the barriers that this child has and the way she should be accommodated. (P3)

However, beyond the acknowledgement of the importance that knowledge of barriers to learning and cognitive neuroscience play in structuring support, a lack of application of knowledge was evident. In some cases, the understanding of barriers to learning and cognitive neuroscience appears to be restricted to isolated theoretical knowledge. P5's comments below highlight the limited application of her knowledge to the structuring of learners' support programmes. It is however noted that with the varying roles of school psychologists, this participant is more involved in administrative and emotional support of learners with accommodations than learning support or assessments.

*It's imperative, absolutely, so I came across it in my training. There is this book called *Addressing Barriers to Learning*, I have two copies of it! My training is in barriers to learning I just don't use it as much now cos I don't assess. (P5)*

P4 was also clear on the validity of a sound knowledge of barriers to learning and cognitive neuroscience forming the bedrock of support, but she was sceptical of the actual application of this knowledge to high school learning support. It would appear that in some cases a return to the emphasis of diagnosis and reliance on the medical deficit model has occurred.

I think that it is imperative that we know about it, but I don't know how much people link barriers to learning as a concept to accommodations. Um, I don't think they use the term barriers to learning. If there is a diagnosis like dyslexia then they would go with that. (P4)

P1 and P5 made specific reference to the importance of cognitive neuroscience in shaping supportive interventions for learners with accommodations. However, neither of them referred to the neural signatures involved in reading or written expression barriers to learning. P1 highlighted the importance of a knowledge of cognitive neuroscience and

indicated that in understanding and supporting learners with accommodations it is important to grasp the neurodevelopmental disorders.

So, a lot of my academic development has a lot of bearing on neurodevelopmental psychology. And that is the department that I am doing my PhD through. So, I am always back to the neurodevelopmental disorders. Because in High school it is very important to track when this disorder challenge actually developed. How long has this child been sitting with this challenge? (P1)

Limited application of cognitive neuroscience knowledge was further indicated by P5. This participant communicated her interest in cognitive neuroscience, but her response indicates that it is not something that she currently accesses in her support of learners.

Well, in my training we had a module on neuroscience. Something I am very interested in as I have a degree in physiology. I don't use it much right now. These students have more common issues with reading and concentration. Previously I worked in a special needs school and used it more there. (P5)

The school psychologists' acknowledgement of the general benefits of a sound grasp of barriers to learning and cognitive neuroscience principles confirms the findings of the literature review. However, the limited application of this knowledge raises questions in terms of the need for on-going training that highlights the practical application of knowledge to school support systems.

5.5.4.2 Subtheme 4.2: School psychologist's role as coordinator of support

The support of learners with accommodations is multi-faceted and as discussed in section 3.4, collaborative, broad-based support is what is optimally required for learners with accommodations. However, the implementation of protective broad-based support does not happen without a directing force and collaboration between stakeholders. In section 3.4.1, the possibility of school psychologists constituting the central link in a web of stakeholders was noted (Mohangi & Archer 2015:3). Data collected from the research confirms this standpoint and revealed that there are instances where school psychologists assume a key role in the coordinating, directing and shaping of the

protective support offered to learners with accommodations. This viewpoint was clearly conveyed in P2's comments.

My role is a coordinator role, so I case manage the more intensive cases, particularly those that have a more psychological nature. I have a team of people under me that help me with the accommodations and the skills-based interventions. So, I have got a study skills specialist in my team and I've got a Maths support teacher and an English support teacher. (P2)

5.5.4.3 Subtheme 4.3: Support from an exosystem context

In keeping with Bronfenbrenner's bio-ecological model, documented in Figure 3.7, the data revealed that support for the learners with accommodations is drawn from the following nested contexts, namely the: exosystem context, mesosystem context and microsystem context.

Support from the exosystem context, which includes the local community, was revealed as being important by the collected data. This concurs with Mohangi and Archer (2015:3) in section 3.4.2, who consider collaboration with the wider community as being essential in support of learners. It is noteworthy that school psychologists P6 and P3 play a collaborative role in liaising with support sources seated within an exosystemic context.

Most of my readers and scribes are generally old ladies. Most of them have been in the teaching profession and now they are retired. So, what happens is I've got a WhatsApp group with probably around twelve readers and scribes whom I have done training with. If a child approaches me and says I need a reader for tomorrow Geography Period 3, then I put it on the group and the first reader to answer gets it and comes, and they meet the boy in the foyer of the library. (P6)
When I was at my previous school there were tutor companies that provided scribes but here, they use trained outsourced people. (P3)

P2 also uses support from the exosystem framework, and in this instance a tuition company is evidenced as the support source.

So, we use a company (for amanuensis staffing), I liaise with a company. I train the person. (P2)

A further dimension of support procured from the exosystem was illustrated by P6 in that she derives her initial study skills aspect of support from an exosystemic context.

It's sometimes about time management, organisation and planning. So, we have got Elevate; it's a company which has very young, dynamic presenters. We do Elevate workshops every year for Grade 8 to 11. It's a workshop and they get a book and it is very good, I mean the content is brilliant. (P6)

5.5.4.4 Subtheme 4.4: Support from the mesosystem and microsystem contexts

As outlined in section 3.4.1, support from a mesosystem level would involve a relationship that develops between two or more of the microsystems that may typically involve interaction between the family, school and peer groups (Nel 2015:5; Swart & Pettipher 2019:15).

The data revealed that support from the teachers, which may be coordinated by the school psychologists, is vital in the development of a range of supportive interventions for learners with accommodations. This combined collaborative approach to supportive interventions ideally works to the strengths of each stakeholder.

P1, P4 and P5 highlighted the availability of comprehensive, protective academic support that is implemented by teachers.

The teachers offer support; they are here at half-past six in the morning and they help the students and they have groups of students. They avail themselves completely. (P1)

So, the boys have access to extra lessons with their teachers; every single subject has consolidations lessons. (P4)

So, they have after-school support sessions. So, there is English, Afrikaans, Physics and then I know there is an Art support session, they call it Art Studio. So, there is a lot. (P5)

Further to the support offered by teachers, different levels of support are available at some schools. Similar, but not identical, to the tiered model of support adopted by Finland and discussed in section 2.2.2, P2 described her involvement in an academic support programme with different levels. It is, however, noteworthy that P2 used the word categories rather than tiers or hierarchy to indicate the nature of the support structure.

So, we have drafted our own internal learning policy and category 4 and 5 is where accommodations and additional support are. (P2)

Support sources from the mesosystem vary and L11 indicates that she receives support via peer tutoring from the Matric learners, while L6 made reference to protective supportive interventions from parental tutoring.

Research data also reveals that support from the microsystem and mesosystem contextual basis may involve emotional support. P6 and P2 highlight the important role that school psychologists can assume in providing support from a psychological perspective that engenders personal development.

Well, for me you know you can't divorce the academic and the emotional side. They are very much intertwined and the one affects the other. I do the therapy as well. (P6)

The support is split between three psychologists and the one is particularly involved in therapy and counselling. (P2)

With regard to support of personal development, as outlined in section 3.4.1, supportive efforts from the school psychologist may also include fostering the independence and self-determination of the learners. According to Wehmeyer and Field (2007:3-6), self-determination allows learners to learn skills that will enable them to positively influence their lives; it involves the associated development of the learner's autonomy, competence and relatedness. P1 and P2 endorse independence rather than learnt helplessness as an important factor of their supportive interventions.

And my goal in high school, and what I say to parents, is by the time they matriculate they need to be able to manage their learning needs with independence and resilience. (P2)

We are also helping student with this learnt helplessness and getting over the challenge. There cannot be learnt helplessness. (P1)

The research findings regarding support from the exosystem, mesosystem and microsystem concur with the statement in section 3.4, in that, in order to maximise support offered to the learners, the school psychologist will need to be mindful, responsive and proactive in engagement with multiple and changing systems (Mohangi & Berger 2015:69).

5.5.5 Theme 5: Advantages and challenges of accommodations according to learners

The learners reported positive advantages of accommodations, but the accommodation process is not seamless, and challenges were also experienced.

Interpretation of the data included in Theme 5 involves:

- Advantages of accommodations according to learners
- Challenges of accommodations according to learners

5.5.5.1 Subtheme 5.1: Advantages of accommodations according to learners

To a large extent, the advantages of accommodations according to the learners concur with those outlined by the school psychologists in section 5.5.3. While slight variations are evident, improved academic test results and improved personal development were similarly identified as the principal advantageous elements of accommodations. The following affirming statements, with regard to the improvements in academic test marks, were made by L3, L8, L7, L5, L11 and L12.

My marks have improved a lot, like at the start of the year I only passed like two exams and at the end of the year I only failed one. My English was quite bad, like 24% at the start, and then I got 60%. (L3)

My marks have definitely improved ma'am. They have gone up by 5%. So, I have finally got into the 60's. (L8)

So, I'd say they went up, maybe about like 4%. (L7)

I have improved a lot more than I thought, like to 70! (L5)

Ah, I think probably about 5%, ja, about 5% up. (L11)

I have been able to finish my tests and exams which has benefitted me in getting more marks. (L12)

Besides improvements in academic test marks, advantages of a more general nature were experienced by L2, L7, L1 and L11.

Because it used to be a huge cloud hanging over me because spelling didn't let me show my actual intelligence, so having that accommodation has boosted me. (L2)

Well, the biggest plus for me is like the writing. In the tests that I do, like I can't write quick, so they (amanuensis) help me. Also like she can read it to me because like it takes me like, I am a bit slow with my reading. (L7)

Like now I don't have to rush to finish in time cos I write quite slowly. And I also don't have to worry about my spelling like cos I don't have to sit there and think how to try spell something. (L1)

Like in Maths it doesn't really make a difference cos it's just like numbers and I am fine with that, but with essays and comprehension if she reads it to me then it makes a big difference. (L11)

In keeping with Bronfenbrenner's bio-ecological system theory and the value of support from varying contexts (section 5.5.4.4) improved academic performance may have its origin in more than one context. L3 affirms the positive effects of interaction with his

personal external tutor while L6 experienced advantages that are possibly a result of constructive engagement with his teacher.

So, I have a tutor she used to work in the prep. She comes four or five times a week. She will help me, and she is a really nice lady. So, the first term my grades were really bad and then when I got her, they just started going up. They went from like ... I got 20% more. The accommodations do also help a bit. (L3)

My Afrikaans was going up. It is still going up, but I don't know if that is because of extra time or just because I have a better teacher. I am not sure. (L6)

A further advantage of accommodations that was noted by the learners and school psychologists alike relates to the heightened personal development of the learners. L5, L2 and L11 cited increased self-respect and greater confidence as advantages of their accommodations.

I am a lot more confident in who I am. I have gained a lot more respect for myself and how I went through it and just got through it. (L5)

Personally, I think it's helped my confidence grow. (L2)

I just feel a lot more confident just going into the exams. (L11)

Further personal advantages, in the form of a reduction in stress, were conveyed by L4, L12, L6 and L2.

I think that it has just taken a lot of stress away from finishing on time and stuff like that. (L4)

It has helped me more with stress and coping in exams and tests. (L12)

There's a lot less stress when I am in the separate venue. I feel I can be more calm. I can take my time instead of rushing. (L6)

So not having Afrikaans is amazing. It has taken off that massive pressure from me. So like Afrikaans was a big stress and very demoralising and infuriating to not be able to grasp anything. (L2)

An additional personal development related advantage, not mentioned by the school psychologists, was the learners' increased feeling of relatedness that manifested with the implementation of accommodations. The importance of relatedness resonates with the basic principles of the self-determination theory that are discussed in section 3.4.1. Self-determination encompasses the need for autonomy, competence and relatedness and when these needs are actualised, amongst other things, there may be improved availability to learn. The positive feeling of relatedness had different sources for the learners and for L2, her source of relatedness was rooted in a group of school peers that also have accommodations.

So, I know for having the accommodations and the separate venue you have a... I don't want to say community but you do. And it is nice to have people that can relate to what you do, I mean we all have different exams and accommodations, but it is nice. (L2)

For L1 and L8, the general acceptance, by their peers, of their barriers to learning and associated accommodations was also cited as an advantage.

They are fine, they don't say anything. Like sometimes they ask me why I don't do Afrikaans, but I just have to explain it to them. But other than that, there's not really anything. (L1)

They are quite used to it they are like ok, ja you've got a reader. Ja, I think everyone is quite used to it now. (L8)

However, the data from the learners reveals that not every interaction between learners with accommodations and their schoolmates is positive. L5 and L7 communicated incidences where their peers were not magnanimous in their acceptance and understanding of barriers to learning and accommodations. Nevertheless, what stands out is that with the benefit of advantages associated with accommodations, the learners do not appear to personalise these negative communications.

It's a mixed batch. Some kids are really just so sweet, and they understand my situation and other kids don't understand it, so they tend to make comments about it, but it happens in every school, so. (L5)

Well I don't think some of them understand so that is one of the things with some people, they can't figure out like some people have difficulties like reading and writing down and just keeping up with time. Some people just can't understand. (L7)

5.5.5.2 Subtheme 5.2: Challenges of accommodations for learners

In keeping with the challenges of accommodations noted by the school psychologists, resource-based challenges were also experienced by learners with accommodations. Physical, financial, human and time related resource challenges were itemised by the learners.

Resource-related challenges were a feature for the learners, but it is noteworthy that the manifestation of the resource-related challenges are different to those experienced by the school psychologists.

With regard to physical resources, while the actual sourcing of the physical resources, such as separate venues, was highlighted in section 5.5.3.2 as an accommodation-related challenge for school psychologists, the reliability of physical resources, namely computers and i-pads, posed a challenge for some learners.

L2 and L1 comments attest to the physical resource reliability challenges.

Something that is a big issue for all separate venue girls is that the computers often are not working. They often have technical issues or things and it's just constant that some aren't working. So, it's very frustrating you are putting up your hand, ma'am the readers not working again and again and again. So, it is often the same pattern continuing but no evident change. I mean I guess they try their best. (L2)

So last year exams one of the readers (electronic/computer) wasn't working so then I started to stress but then they managed to get a teacher and then we went to another venue and the teacher just read to me. (L1)

Sensitivity to the tonality of the pre-recorded voice on the electronic readers was communicated as a further physical resource related challenge by L10.

So, for the reader they put our exams on the i-pad, and we have earphones but the one thing that I don't like about that is the voice. It is so sort of chromantic, it's not like a real person's voice. (L10)

Financial resource-related challenges that concur with the literature review and school psychologists' findings, outlined in section 5.5.3.2, with regard to the financial burden of an IEB accommodation application were raised by L12. Furthermore, L12's statement exposes a challenge of exclusivity that surrounds the costly process of accommodations application.

So, my only change would be pricing of the process. For it to be benefitting children, all children should have access to be able to apply, but unlike me who fortunately my parents could afford it and some was covered by medical aid, some children don't have that luxury and then are unable to get the best learning experience. (L12)

Beyond physical and financial resource challenges, human resource challenges were raised as a further challenge experienced by learners with accommodations. Human resource challenges centred around difficulties in collaboration between stakeholders in the accommodation process.

L2 expounded a lack of effective collaboration and communication between the school psychologist, who case-manages the learners with accommodations and the teachers as a challenge in the accommodations process.

So, then the education of the staff, so going into a new grade please let the teachers know and tell them 'cos so many of them are oblivious or unaware of what we need or have. So, the teachers don't get communicated with or sometimes they don't even know you have a concession. So eventually sometimes in tests when it's not an exam it's just a normal controlled test, you often don't want to use your concessions because it feels like you are an inconvenience to them. (L2)

Finally, time-related resources-challenges were revealed as another area of difficulty experienced by the learners. The learners' perception of time-related challenges varied

and were slightly different to those experienced by the school psychologist. The lengthy time taken to process an IEB accommodations application was singled out as a challenge by L2.

From my experience it was terrible not knowing when you would ever hear back or if you had the accommodations or didn't. So, going into Grade 10 I never knew if I was doing Afrikaans or not. (L2)

Learners were also challenged by the slowness in the school's applications to the IEB for accommodations, as communicated by L11, whereas L5 was personally frustrated by her school's internal policy whereby Grade 8 learners are not allowed to make a formal IEB accommodation application before mid-year Grade 8.

I think it would have made a big difference if I could have had like these accommodation things earlier. So, I think my mom did try to get it, but they weren't really doing it then. (L11)

I think it is difficult to understand why I didn't initially get help because I have had this all through my life and coming through into Grade 8 and being the new kid who can't read doesn't help the situation. I failed pretty miserably for three terms. (L5)

A concluding timing related challenge experienced by learners, and communicated by L3, occurred when teachers did not adhere to the timetabled test dates for class assessments. Instead unscheduled "spot tests" were given, which made it impossible for the learner to access his reader accommodation.

So like spot tests, like that annoys me. So, like we had one last week in Geography and I didn't pass that one. Like I thought it said degrees, but it actually said distance cos I couldn't read it properly without my reader, so I lost a few marks on that. (L3)

5.6 REPRESENTING THE DATA

The final step in the data analysis process, as outlined in Figure 4.5, is representing the data:

- Step 6, representing the data.

Representation of the research data is reflected in Figure 5.3.

REPRESENTATION OF RESEARCH DATA
THEME 1: Inclusion and accommodation policies
<ul style="list-style-type: none"> • School psychologists have good awareness and understanding of national inclusion and accommodation policies but limited awareness of international inclusion and accommodation policies. • Difficulties in procuring updated <i>IEB Policy and Procedures: Accommodations and Exemptions</i> document. • Need for review of elements of IEB accommodations test battery, namely the SSAIS–R and Edinburgh Reading Test.
THEME 2: Types of accommodation
<ul style="list-style-type: none"> • Conformation with the four major kinds of accommodations namely: settings, scheduling, presentation and response accommodations. • Most commonly awarded accommodations are additional time and separate venues
THEME 3: Advantages and challenges of accommodations according to the school psychologists
<p><u>Advantages</u></p> <ul style="list-style-type: none"> • Opportunity for learners to work to potential. • Improvements in learner’s academic test results. • Positive personal developments for learners in terms of improved confidence, self-esteem and diminished stress. <p><u>Challenges</u></p> <ul style="list-style-type: none"> • Physical resource challenges including difficulties sourcing sufficient separate venues. • Financial resource challenges that involve the cost of the psycho-educational assessment, and the implementation of scribes and invigilators. • Human resource challenges that include staffing and manning administrative tasks such as the compilation of IEB Accommodation applications and drafting of timetables • Time-related challenges regarding the implementation of accommodations as soon as they are formally granted by the IEB. • Parental pressure including denial of children’s barrier to learning and, conversely, excessive pressure to procure accommodations for university entrance purposes. • Fairness of IEB Accommodation review raised with concern centering on overemphasis of psycho-educational test results.

THEME 4: Support provided to learners with accommodations

- Limited application, by school psychologists, of knowledge of barriers to learning and cognitive neuroscience to supportive interventions. Supportive interventions typically focus on consolidation of subject content knowledge.
- School psychologists may play a key role in coordinating, collaborating and directing support.
- Support is sourced from varying interrelated contexts. From an exosystemic basis, support is derived from tutors/ study skills companies and local community members.
- From the mesosystem and microsystem contexts, support is accessed by eliciting support from teachers, parents, peers and school psychologists. Further support may arise from the learner's improved personal development.

THEME 5: Advantages and challenges of accommodations according to learners

Advantages

- Improvement in academic test marks.
- Improved personal development in terms of increased confidence and feeling of relatedness and reduction of stress.

Challenges

- Physical resource challenges relating to unreliability of school computers and tonality of voice recorder.
- Financial resource challenges, and challenge of exclusivity, as some learners are unable to afford the cost of an IEB Accommodations application.
- Communication difficulties whereby the school psychologist does not adequately convey the needs of learners with accommodations to other staff members.
- Time related challenges including the slowness in procuring an IEB Accommodations review and reluctance of some schools to apply for accommodations early in the Grade 8 year.

Figure 5.3 Representation of research data

5.7 CONCLUSION

This chapter provided an analysis and interpretation of the collected data. An analysis of the qualitative data was made using judicious observations and information that were collected from interviewing six school psychologists and twelve learners with accommodations, between Grades 9 and 11. This material was integrated and interpreted against the backdrop of information from the literature studies.

CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter presents a summary of the literature reviews and the empirical findings. Significant conclusions and recommendations that have emerged from the findings are discussed and the limitations of the research and suggestions for further practice and research are provided.

In this study a qualitative approach was used to investigate the research problem:

How the educational psychologist can promote the development of inclusive education through accommodations in South African independent high schools.

In respect of gaining insight into the research problem, literature studies were undertaken and thereafter, interviews and observations were used as methods of data collection. The study addressed the following research sub-questions:

- What policies underpin inclusion and accommodations in independent high schools?
- What is the nature of accommodations available to independent high school learners?
- What are the educational psychologist's perceptions of the use of accommodations in independent high schools in general?
- What support may the educational psychologist provide to learners who require accommodations?
- What are the learner's perceptions of the use of accommodations in independent high schools?

6.2 SUMMARY OF THE LITERATURE REVIEWS

Figure 6.1 provides an overview of the literature reviews.

<ul style="list-style-type: none"> • Legislation and policies that underpin international and national inclusion and accommodation policies in America, Finland, Australia and South Africa
<ul style="list-style-type: none"> • Prescribed intellectual and academic assessments, and limitations thereof, for accommodation purposes in IEB High schools
<ul style="list-style-type: none"> • Types of accommodation, including setting, scheduling, presentation and response accommodations
<ul style="list-style-type: none"> • Barriers to learning in reading, and associated cognitive neuroscience that may attract accommodations, including word-reading accuracy, reading rate or fluency, reading comprehension, dyslexia and aphasia
<ul style="list-style-type: none"> • Barriers to learning, and associated cognitive neuroscience, in written expression that may attract accommodations including spelling accuracy, clarity or organisation of written expression and writing rate
<ul style="list-style-type: none"> • The role of the school psychologist in supporting learners with accommodations which, in association with Bronfenbrenner’s bio-ecological model, involve source support from multiple contexts
<ul style="list-style-type: none"> • Learners’ perceptions that are influenced by self-determination of how well accommodations work
<ul style="list-style-type: none"> • Advantages and challenges of the use of accommodations

Figure 6.1 Overview of the literature reviews

The literature reviews provided the framework for the research and furthermore placed it within the context of research both in South Africa and internationally.

At the outset, in Chapter 2, legislation and policies that underpin international and national inclusion and accommodations were reviewed. It was noted that inclusion and associated accommodations are highly context dependent, and in each country a range of political and educational agendas have given rise to specific legislation and policies that influence their progress in the inclusive process. From an international perspective the legislation and policies of America, Finland and Australia were investigated.

Further investigation of literature reveals that inclusive education, including accommodations, has not been overlooked in South African and while it is important to take into consideration international legislation and policies, the unique political and educational context that exists in South Africa has given rise to the development of country-specific legislation and policies. Within a South African context, inclusive education has its origins in a rights perspective and is underpinned by values of equality and human rights which are fundamental principles of the Constitution of the Republic of South Africa Act 108 of 1996 (Christie 2008:13; South Africa 1996a; 1996b; Swart & Pettipher 2019:18). The Education White Paper 6: Special Needs Education: building an inclusive education and training system (2001), and the SIAS (DBE 2014a), coupled

with DBE's (2014b) approval of the amendments to the policy document, *National Policy pertaining to the conduct, administration and management of examinations and assessment for the National Senior Certificate*, Government Gazette 37652, have been central in the guidance of inclusive education and the implementation of accommodations for learners who experience barriers to learning within a South African context (Swart & Pettipher 2019:18-19).

With regard to education in independent high schools in South Africa, according to the ISASA's (2002:3) Diversity and Equity Policy, independent schools are also committed to an inclusive model of education. More specifically, the *IEB Policy and Procedures: Accommodations and Exemptions* (2018) document currently provides the framework for inclusive based accommodations in independent high schools. It outlines: the procedural route for an IEB accommodation, the documents and testing requirements for an IEB accommodation application and the barriers to learning for which an IEB accommodation may be granted. Furthermore, *IEB Policy and Procedures: Accommodations and Exemptions* acknowledges the four major kinds of accommodations: setting accommodations, scheduling accommodations, presentation accommodations and response accommodations (IEB 2018).

With regard to the IEB testing requirements, it is noted that the IEB assessment battery includes both international, Western tests and a South African test. Foxcroft (2011:10) and Laher and Cockcroft (2014:303) expound the notion that psychological assessment in South Africa is fraught with controversy in respect of indiscriminate, unfair and biased use of both national and international tests. While cognisance is taken of the limitations of international tests that have not been standardised or adapted for use in South African the option of using South African tests is also problematic. One of the intellectual test options, the SSAIS-R, cited in the *IEB Policy and Procedures: Accommodations and Exemptions* makes use of test norms that are outdated and its standardisation did not include black learners (IEB 2018). The SSAIS-R was only standardised for English and Afrikaans-speaking white, Coloured and Indian South African learners. Learners attending private and special schools were also not included in the standardised sample (Cockcroft 2013:52).

In Chapter 3, barriers to learning that attract accommodations and the role of the school psychologist in supporting learners with accommodation were investigated. A cognitive

neuroscience approach was used to gain insight and information on barriers to learning that underpinned the need for accommodations. Cognitive neuroscience uncovers the relation between the brain and learning and development (Kruger 2018:374). As stated in Chapter 1, the point of investigating barriers to learning from a cognitive neuroscience approach was to broaden the understanding of barriers to learning with a view to developing more comprehensive protective factors and support plans (Cappa 2001:300; Lezak et al. 2012:5). As barriers to learning in the area of reading form the basis of several accommodations, special attention was given to the neural systems for reading.

With regard to reading, Ward (2015:297) posits that early readers rely heavily on the two slower analytical neural pathways associated with the Broca's and Wernicke's areas, while more competent readers rely more heavily on the "express route" to reading, which is seated in the occipito-temporal area of the brain. An understanding of the neural signature of reading may facilitate greater insight into interpretation of the reading test results, which form part of an IEB accommodations application, and thereafter may foster the implementation of appropriate supportive measures. Accommodations provide an avenue of support for learning with barriers to learning in reading. The nature of the accommodations will vary according to the specific barrier experienced but may include additional time and/or the use of a reader in a separate venue.

While the DSM-5 (APA 2013) no longer classifies dyslexia as a separate diagnosis, a literature review on dyslexia was included in the research as it is specifically itemised in the *IEB Policy and Procedures: Accommodations and Exemptions* as a criterion for accommodations (IEB 2018). With regard to a neural signature associated with dyslexia, disruption of the posterior reading system is indicated (Shaywitz & Shaywitz 2003:158-166). A some (2017:18) postulates that it is important that the brains of learners experiencing dyslexia are viewed as being different rather than defective. The accommodations required for dyslexia are likely to vary according to the nature of the dyslexia experienced and may include additional time, disregard of spelling, the use of a reader and/or scribe in a separate venue and possible exemption from learning a First Additional Language.

Barriers to learning in written expression also formed part of the literature review and spelling accuracy, clarity or organisation of written expression and writing rate were the

elements involved in the literature review. According to Lombardino (2012:49) and Montgomery (2007:23), the acquisition of spelling skills should be viewed within a developmental framework. With regard to support for the learner experiencing barriers to learning in spelling, a spelling accommodation which ensures that marks are not deducted for poor spelling may be appropriate. In some cases barriers to learning in spelling may also contribute to the need for an additional time accommodation, as the learner may need time to recall spelling information, and/or the need for a scribe accommodation (Venter 2015b:45).

From the literature review, it was deduced that clarity or organisation of written expression is an advanced form of language and the skills required for spelling and punctuation and grammar are fundamental components in effective written expression. Furthermore, writing rate was also seen to play a role in the clarity and organisation of written expression. Friend (2011:134) confirms that writing rate has its origins in motor skills. However, writing rate is also seen to have a relationship with spelling as a lack of automaticity in retrieval of sound-symbol knowledge and the poor visual recall of words may result in a slow writing pace. Working memory may also influence writing rate as the learner may not have fully automatised letter production and furthermore, the ability to remain focused and engaged may also affect writing rate and thereafter influence clarity or organisation of writing expression (Dohla & Heim 2016:6; Friend 2011:135; Phillips et al. 2013:123).

Several neural mechanisms are seen to be involved in clarity or organisation of written expression. From an accommodation standpoint, persistent barriers to learning in clarity or organisation of written expression may attract an additional time accommodation and/or the use of a scribe or the use of a digital device such as a computer. It is noteworthy that the use of a scribe and computers attract a separate venue accommodation (Venter 2015b:46).

In Chapter 3, the role of the school psychologist in supporting learners with accommodations was investigated in the literature review. An overarching principle revealed through the literature review is the school psychologist's potential to adopt a pivotal supportive role with regard to collaboration between stakeholders in the varying contexts; according to Mohangi and Archer (2015:3), the school psychologist may

constitute the central linkage in a web of stakeholders involved in the support of learners.

With regard to the school psychologist's supportive role, the research placed emphasis on the bio-ecological model of human developments, and to this end, Bronfenbrenner's multi-dimensional model was taken into account in relation to support. Bronfenbrenner proposes that four basic principle components are in constant interaction with each other in human development and these include the proximal process or interactions, person characteristic, contexts and time. With regard to the context perspective, four nested systems were identified: the microsystem, the mesosystem, the exosystem and the macro system (Bronfenbrenner & Morris 2006:795-6). Nel (2015:4) posits that when a positive alliance exists between contexts and stakeholders, which typically involves the parents, learners, the school and the school psychologist, it is more likely that accommodations will manifest as significant protective factors and that the accommodations process will be more readily accepted.

Against the backdrop of Bronfenbrenner's bio-ecological model of human developments, the learner's perceptions of how well accommodations work was included in the literature review. At a microsystem's level, self-determination, which is upheld by the presence of three basic universal needs: autonomy, competence and relatedness, was considered (Moneta 2013:68). A key principle of self-determination that has relevance to the positive outcomes of accommodations, is that the higher the learner's self-determination, the more likelihood there is that the learner will be motivated to persist in the face of risks and obstacles (Ryan et al. 2009:112). The literature study revealed that it is unlikely that knowledge, skills and attitudes for self-determination will be learned without direct intervention and support of the learner. Strategies to impart knowledge, skills and beliefs leading to enhanced self-determination development may be initiated by the school psychologist and in the spirit of inclusion, interventions may be far reaching if the school psychologist addresses self-determination through whole-school curriculum, family support programmes and staff development (Hefferon & Boniwell 2011:139; Wehmeyer & Field 2007:16).

Finally, the advantages and challenges of the use of accommodations was considered in the literature review. The advantages that were revealed in the literature review included: opportunity for the learners that experience barriers to learning to work

optimally, development of resilience, identification of learning styles and associated study skills. The challenges of the use of accommodations included a lack of understanding and awareness of the accommodations process (Bolt & Roach 2009:54). Fairness of accommodations was highlighted as an on-going challenge (Goh 2004:39). Excessive parental involvement or an absence of parental involvement, the quality of the psychologist's or psychometrist's assessment report and the cost of the accommodation application process were listed as further challenges associated with accommodations.

6.3 SUMMARY OF EMPIRICAL RESEARCH FINDINGS

Figure 6.2 outlines five themes that were identified by the empirical study

Theme 1	Inclusion and accommodation policies	<ul style="list-style-type: none"> International and national inclusion and accommodation policies. <i>IEB Policy and Procedures: Accommodation and Exemptions document.</i>
Theme 2	Types of accommodation	<ul style="list-style-type: none"> Setting, scheduling, presentation and response accommodations.
Theme 3	Advantages and challenges of accommodations according to the school psychologists	<p><u>Advantages</u></p> <ul style="list-style-type: none"> Opportunity to work to potential and improve test results. Improved personal development of learners. <p><u>Challenges</u></p> <ul style="list-style-type: none"> Physical, financial, human and time resource related challenges. Parental influence. Fairness of IEB accommodation review.
Theme 4	Support provided to learners with accommodations	<ul style="list-style-type: none"> Limited evidence of application of knowledge of specific barriers to learning and cognitive neuroscience to supportive interventions. Supportive interventions typically focus on consolidation of subject content knowledge. School psychologists assume key role in coordinating, collaborating and directing support. Support sourced from exosystem, mesosystem, and microsystems.
Theme 5	Advantages and challenges of accommodations according to learners	<p><u>Advantages</u></p> <ul style="list-style-type: none"> Improved academic test marks and improved personal development. <p><u>Challenges</u></p> <ul style="list-style-type: none"> Physical, financial, communication and time related challenges.

Figure 6.2 Summary of the empirical findings – Theme 1–6

6.3.1 Theme 1: Inclusion and accommodation policies

Limited interest and in-depth knowledge of international inclusion and accommodations policies was displayed by the school psychologists. While some school psychologists have procured a level of practical knowledge of international accommodation practices from dealing with international learners within the school body, other school psychologists revealed that they have no knowledge of international policies.

The school psychologists, however, demonstrated greater familiarity and awareness of South African inclusion and accommodation policies. While most school psychologists have gained an understanding of the basic premises of South African inclusion policies and accommodations from their tertiary training, the one school psychologist participant was of the opinion that, with regard to her recent tertiary training, there was a lack of focus on the principles of accommodations. The value of continued upskilling, post tertiary training, was particularly relevant for the one school psychologist whose training had occurred prior to the onset of the inclusive education movement in South Africa. In this instance, the school psychologist had attained a high level of knowledge by means of attendance at an informal reading group and through “hands on” contact at a school level.

The school psychologists were positive in their regard of the *IEB Policy and Procedures: Accommodations and Exemptions* document, but difficulties in procuring the updated version of the policy were expressed (IEB 2018). Furthermore, an on-going need for continued review and renewal of the test battery was outlined and the SSAIS–R and Edinburgh Reading Test were singled out as tests of current concern.

6.3.2 Theme 2: Types of accommodation

The learners and school psychologists confirmed the use, either personally or by learners within respective school bodies, of the following accommodations: additional time, amanuensis, computer, food intake, reader, rest breaks, scribes, separate venue, spelling and First Additional Language exemption.

The above-mentioned accommodations conform to the four major kinds of accommodation that include: setting, scheduling, presentation and response accommodations (Bolt & Roach 2009:43).

Empirical findings indicated that accommodations allowing additional time and separate venues were the most frequently accessed accommodations.

6.3.3 Theme 3: Advantages and challenges of accommodations according to the school psychologists

Accommodations do not aim or profess to cure barriers to learning; rather, they are protective in nature and minimise the academic and non-academic effects that may accompany barriers to learning. In essence, accommodations may provide the scaffolding for more productive engagement with learning and ultimately provide a platform for successful achievement.

According to the school psychologists, a principal, overarching advantage of accommodation is that they allow learners experiencing barriers to learning the opportunity to work to potential.

The school psychologists noted that an encouraging spin-off of learners being able to work without the hinderance of barriers to learning was the resultant improvement in the learner's academic test results.

Furthermore, enmeshed in the facilitation of the opportunity for learners to work optimally, positive personal development in the form of increased self-esteem and confidence and diminished stress was noted as an advantage of accommodations.

The school psychologists also communicated their awareness of challenges associated with accommodations and reference was made to physical challenges whereby difficulties in provision of all the required separate venues was noted.

Demands on financial resources was cited as an accommodation-related challenge. According to the school psychologists, the financial burden of an accommodation may initially involve the cost of the psycho-educational assessment and IEB application fees.

Thereafter the financial implication associated with the provision of scribes and readers, that due to staffing restraints may need to be outsourced and privately funded, were outlined as challenges. The practical challenges of procuring the human resources needed for the wide range of associated duties aligned with the accommodation process were highlighted by the school psychologists. The heavy administrative burden associated with the accommodation process, in terms of compiling the accommodation application and thereafter in the timetabling and implementation aspect of accommodations, were named as challenges that are rooted in human resources.

Timing-related challenges in terms of fulfilling the accommodations granted by the IEB during the lower grade of high school and the time-consuming aspects of upskilling, collaborating and communication with teachers were specifically referenced as challenges perceived by the school psychologists.

Parental involvement was cited as challenge. The challenges varied from parental denial of the existence of the learner's barriers to learning, which slowed down the accommodations process, to excessive parental pressure to procure accommodations for their children, with the ultimate goal of increasing their child's chances of gaining entry to university.

Finally, the fairness of the accommodation review by the IEB Accommodation Panel was raised as a challenge experienced by the school psychologists. It was questioned whether the review of the application is made in consideration of the full psycho-educational report and supporting application documents or if only portions of the application are accessed.

6.3.4 Theme 4: Support provided to learners with accommodations

The school psychologists were unified in their acknowledgement that a broad-based understanding of barriers to learning and cognitive neuroscience associated with barriers is important in that it engenders a comprehensive understanding of the associated risk factors and difficulties which, in turn, fosters the development of protective supportive interventions.

There was, however, variance in the school psychologists' actual application of knowledge of barriers to learning and cognitive neuroscience to their supportive interventions devised for learners, and this appeared linked to the varying roles that the school psychologists assume within a school setting. Where the school psychologist's primary role was the development of academic support, knowledge of barriers to learning and cognitive neuroscience appeared to be integrated in the compilation of support structures. However, where school psychologists were predominantly involved in administrative accommodation related duties and/or the emotional support of learners, limited application of cognitive neuroscience principles was evident.

Against the backdrop of the multi-faceted supportive roles that the school psychologists adopt in their support of learners with accommodations, a central, pivotal role emerged. This involves upholding inclusive practices and coordinating, collaborating and directing of the protective support.

The empirical findings reveal that in adopting the role of overseeing supportive interventions, the school psychologists need to be proactive in their engagement with multiple, interrelated, changing systems. This aligns with Bronfenbrenner's bio-ecological model which highlights the interactions and interdependence of several nested contexts. The research findings reveal that school psychologists are involved in accessing support from the exosystemic context in that persons from the local community assist as readers, scribes and study skills tutors.

From a mesosystemic and microsystems context, support is procured through interaction and engagement with teachers, parents, peers and fellow school psychologists. Empirical findings indicate that these interactions precipitated multiple supportive interventions of an academic nature while administrative support, in the compilation of the accommodation applications, also occurred. Furthermore, emotional support that engendered the learners' personal development and ultimately provided scaffolding for successful outcomes was apparent.

6.3.5 Theme 5: Advantages and challenges of accommodations according to learners

In concurrence with the school psychologists' standpoint regarding the advantages of accommodations, the empirical findings revealed that learners also experienced improved academic test marks and heightened personal development as advantages associated with accommodations. The learners specified improved confidence levels, and reduction in stress as areas of personal development and furthermore, increased feelings of relatedness were conveyed.

In terms of challenges, the physical resource challenges experienced by learners encompassed computers and electronic readers reliability difficulties. The tonality of the pre-recorded voice used on the electronic readers was named as a further physical resource related challenge.

Financial resource related challenges were noted, and the high cost of the accommodation process was cited as problematic. The issue of exclusivity and elitism was raised in as much as the financial cost potentially precludes some learners from accessing accommodations.

A lack of effective communication between school psychologists and teachers was outlined as a further challenge experienced by learners, and this difficulty resulted in its being problematic for some learners to access their awarded accommodations.

Finally, slowness in procuring accommodations was raised as a challenge experienced by learners. In some instances the delay in attaining accommodations arose from a lengthy review process by the IEB Accommodations Panel, while in other instances the reluctance of some schools to apply for accommodations early in the Grade 8 year was the cause of delay.

6.4 RESEARCH CONCLUSIONS

Based on the literature reviews and empirical findings, answers to the research sub-questions have been generated and are presented as research conclusions.

6.4.1 What policies underpin inclusion and accommodations in independent high schools?

Inclusion and accommodations are highly context dependent, and while South Africa's history, coupled with the diversity within the South African society, has resulted in a unique approach to inclusion and accommodations, this approach has not developed in a vacuum and therefore consideration of international legislation and policies should be upheld (Swart & Pettipher 2019:18-23). The legislation, policy documents and guidelines that have particular reference to inclusion are listed in section 1.2.4.4. The empirical findings reveal a familiarity and understanding of the South African policies, but a general lack of awareness of international policies.

The ISASA is also committed to an inclusive model of education and with regard to accommodations in independent high schools, the *IEB Policy and Procedures: Accommodations and Exemptions* document provides the guiding framework (IEB 2018; ISASA 2002). The effectiveness of this document was confirmed by the empirical finding but difficulties in procuring updated versions of this document were raised.

6.4.2 What is the nature of accommodations available to independent high school learners?

The overarching framework of accommodations details four major kinds of accommodation that include: setting, scheduling, presentation and response accommodations (Bolt & Roach 2009:43).

Within this broad-based framework of accommodations, the scope for case-by-case granting of accommodation is upheld by the independent high schools and the IEB. As outlined in Table 2.3, the IEB is proactive in its effort to provide specific accommodation options for a wide range of barriers to learning.

Empirical research confirms the four major types of accommodations accessed by independent high school learners and a high prevalence of additional time and separate venues was noted.

6.4.3 What are the educational psychologist's perceptions of the use of accommodations in independent high schools in general?

The literature review, as indicated in section 3.5.1.1, endorses the key finding of the empirical research, in that school psychologists view the use of accommodations as being a powerful protective factor for learners experiencing barriers to learning.

Central to the school psychologist's perceived value of accommodations is the premise that the true ability of learners experiencing barriers to learning is frequently impeded by difficulties associated with such barriers. Accommodations help to buffer the impact of barriers to learning and the empirical findings single out improved academic marks and increased personal development in the areas of confidence, self-esteem and relatedness as important advantages for learners with accommodation in independent high schools.

A further advantage of accommodations that is pertinent to school psychologists and is outlined in literature, but was not included in the empirical findings, is that the use of accommodations may promote greater awareness and embracement of the concept of universal design of assessment. As stated in section 3.5.1.1, universal design of assessment embraces the notion that from the outset, assessments should be designed to be usable and accessible to a diverse range of learners.

Both literature and the empirical findings are unequivocally clear that the use of accommodations is not without challenges. Challenges, as perceived by school psychologists, were typically resource based and difficulties with physical, financial, human and time resources were noted. Furthermore, parental involvement, ranging from parental denial of their children's barriers to learning to excessive parental pressure to attain accommodations poses a further challenge for school psychologists.

6.4.4 What support may the educational psychologist provide to learners who require accommodations?

Empirical findings indicate that the school psychologists, in keeping with section 3.1, are unified in their acknowledgement of the importance of protective supportive interventions being underpinned by a comprehensive understanding of barriers to

learning and associated cognitive neuroscience. However, variance in the school psychologists' actual application of this knowledge to the supportive interventions was evident, and the variance appeared linked to different roles that the school psychologists assume within school settings. Where the school psychologist's primary focus was academic support of learners with accommodations, there appeared to be greater consideration of the specific nature of barriers to learning and associated cognitive neuroscience than when the school psychologist's role was more diverse and included emotional support, coupled with the administrative and implementation aspects of accommodations.

In accordance with Bronfenbrenner's bio-ecological model, outlined in Figure 3.7, support for learners who require accommodations may be sourced from multiple, interdependent systems. Against this backdrop, the literature review and empirical findings are consistent in their identification of the school psychologists being a central linkage between stakeholders from different contexts that are involved in the support of learners with accommodations.

An enduring reference point for the school psychologist's supportive interventions is seated in the macrosystem and encompasses the South African legislation and policies. As outlined in section 4.4.2, the beliefs and values enshrined in the Constitution of the Republic of South African Act 108 of 1996 coupled with the South African Schools Act 84 of 1996 and the Education White Paper 6 of 2001 serve as foundational cornerstones of the school psychologist's supportive interventions (South Africa 1996a; 1996b).

Under the umbrella of macrosystemic support, literature and empirical findings suggest that the school psychologists should ideally draw support from several systems. Empirical findings indicate that support from the exosystemic context was procured from members of the local community who served as scribes, readers and tutors. From the mesosystem and microsystem, teachers, parents, peers and fellow school psychologists proved to be important sources of support while further support arose from the learners improved personal development.

6.4.5 What are the learners' perceptions of the use of accommodations in independent high schools?

Learners' perceptions of accommodations are personal and individualistic in nature and, as such, while commonalities in perceptions may occur, no two learners will experience accommodations in the same way.

Empirical findings highlight improved academic performance and heightened personal development as learners' perceived advantages of the use of accommodations. In keeping with the literature reviews, increased academic competency and associated success coupled with improved confidence and feeling of relatedness resonate with self-determination, as outlined in section 3.4.1 and resilience as expounded in section 3.5.1.2. Both self-determination and resilience are powerful agents in allowing learners to rise above risk factors.

The empirical findings further reveal that while the learners have positive perceptions of accommodations, challenges are also part of their experiences. Reference was made to physical challenges in the form of computer-reliability related difficulties. Financial challenges and the perception that the cost of the accommodation process is prohibitive, and in some instances exclusionary and elitist, were noted. Poor communication between stakeholders in the accommodation process was perceived as a real challenge by learners. Finally, the slowness in being able to access accommodations was indicated as a further negative perception of the accommodation process.

6.5 RECOMMENDATIONS

In this section, material from the literature reviews and empirical findings is integrated to provide overall recommendations.

6.5.1 Recommendations at an IEB level

- Note the on-going emphasis of the importance of inclusion and accommodations within the general education setting and advocacy for an accorded allocation of

funds for research. More research is needed to determine how best to intervene with learners with accommodations.

- Update and strengthen the existing lines of communication between the IEB and independent high schools to ensure that the current *IEB Policy and Procedures: Accommodations and Exemptions* document is readily available to school psychologists and personnel involved with the accommodation process.
- Update the existing IEB website. Provide easy on-line access to the current *IEB Policy and Procedures: Accommodations and Exemptions* document.
- Adopt a cyclic approach to the updating of the *IEB Policy and Procedures: Accommodations and Exemptions* document. This may ensure greater consistency in the release date of the updated document.
- Update IEB accommodation application forms to include specific, succinctly itemised details on the learner's background history, barriers to learning and supportive interventions received. This may provide a more comprehensive, holistic baseline for the application review process.
- Periodically review the test battery specified for the psycho-educational assessment that is required for the purposes of an IEB accommodations application to ensure that learners have maximum accessibility to updated, informative and useful test instruments. The need for review of the SSAIS–R and Edinburgh Reading Test was highlighted.
- Note on-going consideration of the merits and inclusion of universal design principles in assessments.
- Take note of the on-going consideration of the financial burden of accommodations. The possibility of these costs being reduced through the use of technology at a testing and implementation level may be investigated.
- Provide on-going, well-advertised training on accommodation related issues that is open to the greater community of psychologists, not only those psychologists in service at schools. Assessments and supportive interventions are conducted by a wide range of professionals outside of schools, and casting the net of upskilling opportunities more extensively has potentially positive ramifications for schools, school psychologists and learners.

6.5.2 Recommendations for the school and school psychologists

Since the scope of the study at 1.6 as well as the operational definitions of independent schools (1.6.4) and educational psychologist (1.6.6) that includes a school psychologist in an educational setting (Moolla & Lazarus, 2014), an interrelationship between school and psychologist is in keeping with Bronfenbrenner's mesosystem.

- Deepen knowledge on international and national inclusion and accommodation policies as this provides the bedrock for comprehensive supportive interventions.
- Capitalise on opportunities for in-depth training that focuses on providing skills and knowledge regarding barriers to learning and cognitive neuroscience that can be applied to supportive interventions for learners with accommodations in mainstream high schools. This may be done through attendance of training courses, enrolment in on-line courses or through the generation of a support group/network.
- Strengthen collaborative interactions between school psychologists from different schools to create a network for discussion and exchange of accommodation and supportive interventions strategies.
- Strengthen collaborative interactions between school psychologists, teachers, other support providers and learners with accommodations. It may be useful to schedule and formally timetable periodic meeting opportunities in order to create a solid base upon which collaborative efforts may be developed.
- Strengthen on-going communication with parents to ensure understanding of the essence of inclusion and accommodation policies and procedures. It is important for parents to be adequately informed in order for them to provide appropriate support.
- Strengthen emotional support offered to learners at a school level, as managing emotions and developing self-determination and resilience are foundational factors of effective learning and may optimise accommodation benefits and ultimately reduce the number of accommodations that are required for emotionally based barriers to learning.
- Optimise the use of physical and human resources by having an updated inventory or knowledge of available school resources, planning well in advance and liaising with all stakeholders.
- Increase school awareness of the financial burden that the accommodation process potentially poses for parents. Ultimately all learners should have equal access to

accommodations in order to participate optimally during class instruction and engage fully within testing contexts.

- Make use of on-going consideration of further use of technology to reduce the cost of the accommodations process and to engender greater learner independence in the learning setting.

6.5.3 Recommendations for the learners

- Accommodations should ideally be used in conjunction with effective instruction and it is recommended that learners commit fully to their respective learning programmes.
- If need be, learners should be able to self-advocate their need for an accommodation to relevant school personnel.
- Assume responsibility for following up with the school psychologist to determine whether the accommodations application review has been returned to the school by the IEB Accommodations Panel.
- Strengthen collaboration and communication with the school psychologists, teachers and other support providers to ensure optimum usage and correct implementation of accommodations.
- Respectfully communicate with school psychologist or relevant school personnel if school resources, such as computers, are unreliable.
- Upskill on technological support and strategies that may enhance independence and competencies.
- Establish a well-organised, proactive approach to exam timetabling and ensure that the timetable/venues are in the learner's personal possession prior to commencement of examinations.
- Be mindful of the role of personal self-determination and resilience in optimising the merits of accommodations.

The feedback process had already involved informing the IEB Chief Executive Officer, the school principals as well as the educational psychologists and learner participants and their parents of the findings of this research through a report (see Appendices 3 and 37). The recommendations were compiled as guidelines that the researcher had already presented at her school in her capacity as both a learning support therapist and

educational psychologist. As a member of the IEB Accommodations Panel, another presentation of these guidelines to the IEB Accommodations Panel would follow, thus promoting the development of inclusive education by the educational psychologist through the use of accommodations in South African independent high schools. In this manner the researcher hopes to follow in the footsteps of Lockhart Walton (2006).

6.6 AVENUES FOR FUTURE RESEARCH

There is limited research on accommodations as a means of inclusive support for learners experiencing barriers to learning. Thus, there is scope for the development of knowledge that further studies in South Africa may generate.

Further research may focus on:

- How accommodation policies and procedures, within South Africa, may be refined and strengthened through a comparative study with IEB and DoE (GDE).
- How greater sharing of ideas between education and cognitive neuroscience may be purposefully used to inform educational policies and open up new avenues in terms of supportive interventions for learners experiencing barriers to learning. Cognitive neuroscience is generating valuable new knowledge and the understanding of the pathways to competence in reading and written expression may be of particular relevance.
- Examining the extent to which technology can be used in the accommodations process.
- Examining the extent to which the development of personal emotional factors associated with accommodations influence academic performance.

6.7 LIMITATIONS OF THE STUDY

The following limitations were noted and considered in the study:

- There are nine provinces in South Africa and this study involved participants from only four of the provinces. Difference in opinions and experience may occur in the other provinces and the size of the sample thus does not facilitate generalisation about the experiences of the school psychologists or learners.

- Further limitations relating to the sample size exist in that within the four provinces included in the study, the research was restricted to single districts within each province.
- The study focused on the accommodation process within six well-resourced independent high schools. It is acknowledged that independent high schools vary significantly in available resources, and variance in opinions and experiences may occur in independent high schools that are not as well-resourced.
- Some of the school psychologist participants are relatively inexperienced in the field of accommodations and as such generalisation about the experiences of the school psychologists and accommodations is limited.
- The researcher is currently a member of the IEB Accommodation Panel and involved in the review of accommodations and, although not obvious during the interviews, it is possible that this association may have been potentially limiting as it may have influenced some of the participants' responses.

6.8 CONCLUDING REMARKS

It is envisaged that this study has contributed to the body of knowledge on accommodations and inclusive practices. While accommodations have been a part of the inclusive educational process for several years, they are not yet fully fledged within the South African context and there is scope for on-going development and refinement of policies, procedures and implementation strategies.

The research also proved to be of personal value, and it enriched my knowledge on barriers to learning, cognitive neuroscience and the accommodation process. Furthermore, it afforded me the opportunity to engage with school psychologists and learners involved in the accommodations process and by doing so deepened my insight and awareness of the advantages and challenges associated with accommodations.

However, most importantly, the research reinforced my belief that school psychologists have the potential to be valuable resources in the implementation of inclusive educational principles, including accommodations. The positive influence of the school psychologists is strengthened by the powerful ramifications of working collaboratively towards a common goal. It is hoped that the study will heighten school psychologists'

resolve to reflect, embrace new information and to make collaborative dialogue a cornerstone of their inclusive actions and supportive interventions.

LIST OF REFERENCES

Abadzi, H. 2006. *Efficient learning for the poor: insights from the frontier of cognitive neuroscience*. Washington, DC: The World Bank.

Alant, E. & Casey, M. 2005. Assessment concessions for learners with impairments. *South African Journal of Education*, 25(3):185-189.

ADA. 1990. *Americans with Disabilities Act of 1990*.
Available at: www.ada.gov/ada_intro.htm [Accessed 20 July 2015].

Andrew, M & Lee, J. 2014. *The difference between IEPs and 504 plans*. Available at: www.understood.org/en/school-learning/special_services/504 [Accessed 27 November 2015].

APA (American Psychiatric Association). 2013. *Diagnostical and statistical manual of mental disorders*. 5th ed. Arlington, VA: American Psychiatric Association.

Ardila, A, Bernal, B & Rosselli, M. 2016. The role of Wernicke's area in language comprehension. *Psychology and Neuroscience*, 9(3):340-343.

Armstrong, D & Squires, G. 2015. *Key perspectives on dyslexia*. London: Routledge.

Asome, S. 2017. Like a child in a lolly shop! *Learning Difficulties Australia*, 46(1):18-19.

Australian Government Department of Education and Training. 2015a. *Fact Sheet 1: Disability Discrimination Act of 1992*.

Available at: www.docs.education.gov.au/node/35941 [Accessed 4 December 2015].

Australian Government Department of Education and Training. 2015b. *Fact Sheet 2: Disability Standards for Education 2005*.

Available at: www.docs.education.gov.au/node/35943 [Accessed 4 December 2015].

Australian Research Alliance for Children and Youth (ARACY). 2013. *Inclusive education for students with disability*. Available at: www.aracy.org.au [Accessed 12 December 2014].

Bakken, J, Obiakor, F & Rotatori, A. (Eds). 2013. *Learning disabilities: identification, assessment, and instruction of students with LD*. Bingleu: Emerald.

Banich, M & Compton, R. 2011. *Cognitive neuroscience*. Wadsworth: Cengage Learning.

Bauer, A & Shea, T. 2003. *Inclusion 101: How to teach all learners*. Baltimore: Paul H Brookes.

Baumgardner, S & Crothers, M. 2008. *Positive psychology*. New York: Pearson.

Beachboard, M, Beachboard, J, Li, W & Adkison, S. 2011. Cohorts and relatedness: self-determination theory as an explanation of how learning communities affect educational outcomes. *Research in Higher Education Springer Science and Business Media*, (52):853-874.

Bender, W. 2001. *Learning disabilities*. Boston: Allyn and Bacon.

Berninger, V & O' Donnell, L. 2005. Research-supported differential diagnosis of specific learning disabilities, in Prifitera, A, Saklofske, D & Weiss, L. (Eds). *WISC-IV clinical use and interpretation*. New York: Elsevier:189-230.

Bolt, E & Roach, A. 2009. *Inclusive assessment and accountability*. New York: Guilford.

Bornman, J & Rose, J. 2011. *Believe that all can achieve*. Pretoria: Van Schaik.

Bouwer, C. 2016. Identification and assessment of barriers to learning, in Landsberg, E, Krüger, D & Swart, E. (Eds). *Addressing barriers to learning*. 3rd ed. Pretoria: Van Schaik:75-93.

Bronfenbrenner, U & Morris, PA. 2006. The bio-ecological model of human development, in Lerner, R M. & Damon, W. (Eds.). *Handbook of child psychology. Volume 1: Theoretical models of human development*. 6th ed. New York, NY: Wiley: 793-828.

Burns, E. 1998. *Test accommodations for students with disabilities*. Springfield: Charles C Thomas.

Cappa, S. 2001. *Cognitive neurology*. London: Imperial College Press.

Carson, G. 2013. *Inclusive education*. [Online]

Available at: <http://www.cartoonstock.com/directory/i/inclusion> [Accessed 16 October 2013].

Christie, P. 2008. *Opening the doors of learning*. Johannesburg: Heinemann.

Cockcroft, K. 2013. The Senior South African Individual Scales – Revised: a review, in Laher, S & Cockcroft, K. (Eds). *Psychological assessment in South Africa: research and applications*. Johannesburg: Wits University Press:48-59.

Commonwealth of Australia. 1992. *Disabilities Discrimination Act*. Available at: <http://foideewr.gov.au/documents/disabilities-discrimination-act> [Accessed 15 August 2015].

Commonwealth of Australia. 2005. *Disability Standards for Education*. Available at: <http://foi.deewr.gov.au/documents/disability-standards-education> [Accessed 14 August 2015].

Commonwealth of Australia. 2011. *Australian Curriculum, Assessment and Reporting Authority (ACARA)*. Available at: www.acara.edu.au [Accessed 14 August 2015].

Cotterell, E. 2015. The perspective of parents of learners with learning disabilities regarding the implementation of inclusive education in independent schools in the Western Cape: A Case Study. MEd thesis. Pretoria, University of South Africa.

Creswell, J & Poth, C. 2018. *Qualitative inquiry and research design*. 4th ed. London: Sage.

Davies, M. 2012. Accessibility to NAPLAN assessments for students with disabilities: A "Fair Go". *Australasian Journal of Special Education*, 36(1):62-78.

Davies, M & Elliott, S. 2012. Inclusive assessment and accountability: policy to evidence-based practices. *International Journal of Disability*, 59(1):1-6.

(DBE) Department of Basic Education. 2014a. *National Strategy on Screening, Identification, Assessment and Support*. Pretoria: Department of Education.

(DBE) Department of Basic Education. 2014b. *Approval of the amendments to the policy document, National policy pertaining to the conduct, administration and management of examinations and assessments for the National Senior Certificate*. Government Gazette, 37652. Pretoria: Department of Education.

DeBettencourt, L. 2015. *The differences between IDEA and Section 504*. Available at: www.school.familyeducation.com/special-education [Accessed 27 November 2015].

Dednam, A. 2012a. First language: difficulties in spoken language, in Landsberg, E., Krüger, D. & Swart, E. (Eds). *Addressing barriers to learning*. Pretoria: Van Schaik:126-142.

Dednam, A. 2012b. First language: difficulties in reading, spelling and writing, in Landsberg, E., Krüger, D. & Swart, E. (Eds). *Addressing barriers to learning*. Pretoria: Van Schaik:143-166.

Delport, CSL, Fouché, CB & Schurink, W. 2011. Theory and literature in qualitative research, in De Vos, AS., Strydom, H., Fouché, CB. & Delport, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik:297-306.

Denton, C, Fletcher, J, Simos, P, Papanicolaou, A & Anthony, J. 2007. An implementation of a tiered intervention model, in Haager, D, Klingner, J & Vaughn, S. (Eds). *Evidence-based reading practices for response to intervention*. Baltimore: Paul H. Brookes:107-137.

Department of Education. 2008. *National strategy on screening, identification, assessment and support*. Pretoria: Department of Education.

Department of Education. 2001. *Education White paper Six: Special needs education: Building an inclusive education and training system*. Pretoria: Department of Education.

Department of Education, New South Wales. 2015. *Supporting students: Disability, learning and support*. Available at: www.schools.nsw.edu.au/studentsupport/programs [Accessed 29 November 2015].

Department of Health. 2011. *Health Professions Act, 1974 (Act No. 56 of 1974) Regulations defining the scope of the profession of psychology*. Available at: www://hpcsa.co.za/Uploads/editors/User_Files/documents/psych/sep_promulgated_scope_of_practise.pdf [Accessed 23 July 2018].

De Vos, AS. Strydom, H, Fouché, CB & Delport, CSL. 2011. *Research at grass roots*. 4th ed. Pretoria: Van Schaik.

Dohla, D & Heim, S. 2015. Developmental dyslexia and dysgraphia: what can we learn from the one about the other? *Frontiers in Psychology*. 1-18.

Donald, D, Lazarus, S & Moolla, N. 2014. *Educational psychology in social context: ecosystemic applications in Southern Africa*. 5th ed. Cape Town: Oxford University Press.

Durrheim, K. 2006. Research design, in Terre Blanche, M, Durrheim, K & Painter, D. (Eds). *Research in practice: applied methods for social science*. Cape Town: University of Cape Town Press:34-59.

Durrheim, K & Painter, D. 2006. Collecting quantitative data: sampling and measuring, in Terre Blanche, M, Durrheim, K & Painter, D. (Eds) *Research in practice: Applied methods for social science*. Cape Town: University of Cape Town Press:131-159.

Edinburgh Reading Test Stage 4 Manual. 2002. London: Hodder & Stoughton:6.

Elliott, J. 2014. The dyslexia debate: some key myths. *Learning Difficulties Australia*, 46(1) 1-4.

Engel, G. 1980. The clinical application of the biopsychosocial model. *The American Journal of Psychiatry*, 137(5):535-544. [Online] DOI: 10.1176/ajp.137.5.535

Engelbrecht, P. 2012. A theoretical framework for inclusive education, in Engelbrecht, P, Green, L, Naicker, S & Engelbrecht, L. (Eds). 2012. *Inclusive education in action in South Africa*. Pretoria: Van Schaik:3-11.

Fielding-Barnsley, R. 2005. The attributes of a successful learning support teacher in Australian inclusive classrooms. *Journal of Research in Special Educational Needs*, 5(2):68-76.

Finland. 2007. *Special needs education within the education system*. Available at: www.european-agency.org/country-information/finland/national [Accessed 15 August 2015].

Finland. 2010. *Basic Education Act 628/1998 Amendments up to 1136/2010*. Available at: www.finlex.fi/en/laki/kaannokset/1998 [Accessed 15 August 2015].

Fouché, CB & Delpont, CSL. 2011. Introduction to the research process, in De Vos, AS, Strydom, H, Fouché, CB & Delpont, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik: 61-76.

Fouché, CB & Schurink, W. 2011. Qualitative research designs, in De Vos, AS, Strydom, H, Fouché, CB & Delpont, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik: 307-327.

Foxcroft, C. 2011. Ethical issues related to psychological testing in Africa: what I have learned (so far). *Online Readings in Psychology and Culture*, 2(2):10.

Fridriksson, J, Fillmore, P, Guo, D & Rorden, C. 2014. Chronic Broca's aphasia is caused by damage to Broca's and Wernicke's areas. *Cerebral Cortex*, 25(12):4689-4696.

Friend, M. 2011. *Special education: contemporary perspectives for school professionals*. 3rd ed. New Jersey: Pearson.

Garner-O'Neale, L & Harrison, S. 2013. An investigation of learning styles and study habits of chemistry undergraduates in Barbados and their effect as predictors of academic achievement in chemical group theory. *Journal of Educational and Social Research*, 3(2):108-111.

Giangreco, M & Doyle, MB. 2007. *Quick-guides to inclusion: ideas for educating students with disabilities*. 2nd ed. Baltimore: Paul H Brookes.

Gillet, J, Temple, C, Temple C, Crawford, A. (Eds). 2012. *Understanding reading problems*. Boston: Allyn & Bacon.

Goh, DS. 2004. *Assessment accommodations for diverse learners*. New York: Pearson.

Goulandris, N. 2006. Assessing reading and spelling skills, in Snowling, M & Stackhouse, J. (Eds). *Dyslexia speech and language*. 2nd ed. London: Whurr:113-114.

Gous, J, Eloff, I & Moen, M. 2014. How inclusive education is understood by principals of independent schools. *International Journal of Inclusive Education*, 18(5):535-552.

Graham, L & Jahnukainen, M. 2011. Wherefore art thou, inclusion? Analysing the development of inclusive education in New South Wales, Finland and Alberta. *Journal of Education Policy*, 26(2):263-288.

Greef, M. 2011. Information collection: interviewing, in De Vos, AS, Strydom, H, Fouché, CB & Delpont, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik:341-375.

Gregg, N. 2011. Increasing access to learning for the adult basic education learner with learning difficulties: evidence bases accommodation research. *Journal of Learning Disabilities*, 45(1):47-63.

Hardy, I. 2013. Education as a “risky business”: student and teacher learning in complex times. *Journal of Sociology of Education*, 36(3):375-394.

Harty, M & Alant, E. 2012. Early childhood development and intervention, in Landsberg, E, Krüger, D & Swart, E. (Eds). *Addressing barriers to learning*. Pretoria: Van Schaik:87-105.

Health Professions Council of South Africa. 2018. Pretoria: Available at: <http://www.hpcsa.co.za/About> [Accessed 23 July 2018].

Hefferon, K & Boniwell, I. 2011. *Positive psychology theory, research and applications*. London: McGraw Hill.

IEB (Independent Education Board). 2018. *Policy and Procedures: Accommodations and Exemptions*. Johannesburg. Available at: <http://www.ieb.co.za> [Accessed 17 November 2018].

ISASA (Independent Schools Association of Southern Africa). 2002. *Diversity and Equity Policy*. Available at: <http://www.isasa.org> [Accessed 3 March 2013].

Itkonen, T & Jahnukainen, M. 2010. Disability or learning difficulty? politicians or educators? constructing special education in Finland and the United States. *Comparative Sociology*, 25(9):182-201.

Jahnukainen, M & Itkonen, T. 2015. Tiered Intervention: History and trends in Finland and the United States. *European Journal of Special Needs Education*, 31(1):140-150.

Jorgensen, C. 2006. Reconsidering assessment in inclusive education, in Jorgensen, C, Schuh, M & Nisbet, J. (Eds). *The inclusion facilitators guide*. Baltimore: Paul H Brookes:140.

Kanjee, A. 2006. Assessment research, in Terre Blanche, M, Durrheim, K & Painter, D. (Eds) *Research in practice: applied methods for social science*. Cape Town: University of Cape Town Press:476-498.

Keeffe-Martin, M. 2001. Legislation, case law and current issues in inclusion: An analysis of trends in the United States and Australia. *Australia and New Zealand Journal of Law and Education*, 6(1):25-46.

Kelly, K. 2006. From encounter to text; collecting data in qualitative research, in Terre Blanche, M, Durrheim, K & Painter, D. (Eds) *Research in practice: applied methods for social science*. Cape Town: University of Cape Town Press:285-319.

Kellogg, R. 2003. *Cognitive psychology*. 2nd ed. London: Sage.

Kesälahti, E & Väyryen S. 2013. *Learning from our neighbours: inclusive education in the making*. Rovaniemi: University of Lapland Printing Centre.

Kanjee, A. 2006. Assessment research, in Terre Blanche, M, Durrheim, K & Painter, D. (Eds). *Research in practice: applied methods for social science*. Cape Town: University of Cape Town Press:476-498.

Krüger, D. 2018. The brain, cognition and neuro-physical impairment, in Eloff, I & Swart, E. (Eds.). *Understanding educational psychology*. Pretoria, SA: Juta:374-381.

Krüger, D. 2019. Epilepsy, in Landsberg, E, Krüger, D & Swart, E (Eds). *Addressing barriers to learning: A South African perspective*. 4th ed. Pretoria: Van Schaik:347-376.

Krüger, D & Botha, P. 2019. Orientation: neurology in an educational perspective, in Landsberg, E, Krüger, D & Swart, E (Eds). *Addressing barriers to learning: A South African perspective*. 4th ed. Pretoria: Van Schaik:309-328.

- Laher, S & Cockcroft, K. 2014. Psychological assessment in post-apartheid South Africa: the way forward. *South African Journal of Psychology*, 44(3):303-314.
- Landsberg, E. 2012. Learning support, in Landsberg, E, Krüger, D & Swart E. (Eds). *Addressing barriers to learning*. 2nd ed. Pretoria: Van Schaik:69-86.
- Lezak, M, Howieson, D, Bigler, E & Tranel, D. 2012. *Neuropsychological assessment*. New York: Oxford.
- Lishman, W. 2006. The dyslexic brain, in Snowling, M & Stackhouse J. (Eds). *A practitioner's handbook dyslexia speech and language*. London: Whurr:36-53.
- Lockhart Walton, E. 2006. *The extent and practice of inclusion in independent schools (ISASA Members) in Southern Africa*. Pretoria, University of South Africa.
- Lombardino, L. 2012. *Assessing and differentiating reading and writing disorders*. New York: Delmar Cengage Learning.
- Luke, S & Schwartz, A. 2010. Assessments and accommodations. *Evidence for Education* 2(1) 2-19.
- Mampane, R & Huddle, C. 2017. Assessing the outcomes of school-based partnership resilience intervention. *South African Journal of Education*, 37(1):1-13.
- Maree, K. (Ed). 2016. *First steps in research*. 2nd ed. Pretoria: Van Schaik.
- Maree, K. 2016. Planning a research proposal, in Maree K. (Ed). *First steps in research*. 2nd ed. Pretoria: Van Schaik:25-47.
- Maree, K & Pietersen, J. 2016. Surveys and the use of questionnaires, in Maree K. (Ed). *First steps in research*. 2nd ed. Pretoria: Van Schaik:173-190.
- Martinez, M.E. 2010. *Learning and cognition: the design of the mind*. Upper Saddle River, NJ: Pearson.

Mayes, A. 2017. The role of hippocampus and other connected brain regions in memory function. INS (International Neuropsychological Society), mid-year congress, celebrating 50 years. Cape Town, South Africa 5-8 July 2017. INS: Utah.

McGrath, H & Noble, T. 2011. *Bounce back. a wellbeing and resilience program*. 2nd ed. Melbourne: Pearson.

McMillan, JH & Schumacher, S. 2010. *Research in education: evidence-based inquiry*. 7th ed. Upper Saddle River, New Jersey: Pearson.

Mitchell, D. 2010. *Education that fits: Review of international trends in education of students with special education needs*. [Online]
Available at: <http://www.educationcounts.govt.nz> [Accessed 2 March 2013].

Mohangi, K & Archer, K. 2015. Mothers' reflections on the role of the educational psychologist in supporting their children with attention deficit hyperactivity disorder. *South African Journal of Education*, 35(1):1-9.

Mohangi, K & Berger, M. 2015. Inclusive education and educational psychology: forging alliances for support of inclusion at school level in South Africa. *South African Journal of Education*, 14(1):67-85.

Moneta, GB. 2013. *Positive psychology - a critical introduction*. Basingstoke: Palgrave Macmillan.

Montgomery, D. 2007. *Spelling, handwriting and dyslexia*. New York: Routledge.

Moolla, M & Lazarus, S. 2014. School psychologists' views on challenges in facilitating school development through intersectoral collaboration. *South African Journal of Education*, 34(4):1-13. [Online] DOI: 10.15700/201412052103

Moonsamy, S & Durbach, F. 2016. Language and literacy assessment and support, in Nel, M, Nel, N & Hugo A. (Eds). *Learner support in a diverse classroom: a guide for Foundation, Intermediate and Senior Phase teachers of Language and Mathematics*. Pretoria: Van Schaik:213-274.

Mortimore, T. 2008. *Dyslexia and learning style: a practitioner's handbook*. 2nd ed. London: Whurr:49-62.

Mowatt, R. 2019. National distribution of IEB schools [email] (Personal communication, 24 July 2019).

Nation, K. 2006. Assessing children's reading comprehension, in Snowling, M & Stackhouse, J. (Eds). *Dyslexia speech and language*. 2nd ed. London: Whurr:128-142.

National Research Council. 2004. *Keeping score for all: The effects of inclusion and accommodation policies on large-scale educational assessment*. Washington DC: The National Academies Press.

Ndlovu, S & Walton, E. 2016. Preparation of students with disabilities to graduate into professions in the South African context of higher learning: obstacles and opportunities, *African Journal of Disability*, 5(1):1-8.

Nel, M. 2015. Understanding classroom assessment within an inclusive framework, in Dunbar-Krige, H, Venter, R, Nel, M & Mavuso, M. (Eds) *Guidelines for assessment adaptations*. Pretoria: Van Schaik:1-17.

Nel, M & Nel N. 2016. Understanding language in learning, in Nel, M, Nel, N & Hugo, A. (Eds). *Learner support in a diverse classroom: a guide for Foundation, Intermediate and Senior Phase teachers of Language and Mathematics*. Pretoria: Van Schaik:93-135.

Nel, M, Nel, N & Hugo, A. (Eds). 2016. *Learner support in a diverse classroom: a guide for Foundation, Intermediate and Senior Phase teachers of Language and Mathematics*. Pretoria: Van Schaik.

Nel, M, Nel N & Lebeloane, O. 2016. Assessment and learner support, in Nel, M, Nel, N & Hugo, A. (Eds). *Learner support in a diverse classroom: a guide for Foundation, Intermediate and Senior Phase teachers of Language and Mathematics*. Pretoria: Van Schaik:59-91.

Nieuwenhuis, J. 2016a. Introducing qualitative research, in Maree, K. (Ed). *First steps in research*. 2nd ed. Pretoria: Van Schaik:49-70.

Nieuwenhuis, J. 2016b. Qualitative research designs and data-gathering techniques, in Maree, K. (Ed). *First steps in research*. 2nd ed. Pretoria: Van Schaik:71-102.

Nieuwenhuis, J. 2016c. Analysing qualitative data, in Maree, K. (Ed). *First steps in research*. 2nd ed. Pretoria: Van Schaik:103-131.

Noble, T & McGrath, H. 2008. The positive educational practices framework: A tool for facilitating the work of educational psychologists in promoting pupil wellbeing. *Educational and Child Psychology*, 25(2):120-130.

Nunley, K. 2003. *A student's brain*. Kearney: Morris.

Pather, S. 2019. Confronting inclusive education in Africa since Salamanca. *International Journal of Inclusive Education*, 23(7-8):782-795. [Online] DOI: 10.1080/13603116.2019.1623329

Patterson, T & Joseph, S. 2007. Person-centered personality theory: support from self-determination theory and positive psychology. *Journal of Humanistic Psychology*, 47(1):117-139.

Pepper, D. 2007. *Assessment for disabled students: an international comparison. qualifications and curriculum authority briefing document*.

Available at: www.nationarchives.gov.uk/doc/open-government-licence/ [Accessed 12 November 2017].

Perfetti, C. 2011. Reading processes and reading problems, in McCardle, P, Miller, B, Lee, JR & Tzeng, O. (Eds). *Dyslexia across languages*. Baltimore: Paul Brookes:18-32.

Phillipe, F & Vallerand, R. 2008. Actual environments do affect motivation and psychological adjustment: A test of self-determination theory in a natural setting. *Research in Higher Education Springer Science and Business Media*, (32):81-89.

Phillips, S, Kelly, K & Symes L. 2013. *Assessment of learners with dyslexic-type difficulties*. London: Sage.

Piia, M, Björn, Mikko, T, Aro, Tuire, Koponen, Lynn, S, Fuchs & Fuchs, D. 2015. The many faces of special education within rti frameworks in the United States and Finland. *Learning Disability Quarterly*, 39(1):58-66.

Prifitera, A, Saklofske, D, Weiss & Rolfus, L. 2005. The WISC-IV in the Clinical Assessment Context, in Prifitera, A, Saklofske, D & Weiss, L. (Eds). *WISC-IV Clinical use and interpretation: scientist-practitioner perspective*. London: Elsevier Academic Press:1-8.

Prinsloo, E. 2012. Socio-economic barriers to learning in contemporary society, in Landsberg, E, Krüger, D & Nel, N. (Eds). *Addressing barriers to learning*. 2nd ed. Pretoria: Van Schaik:29-47.

Prinsloo, E & Gasa, V. 2016. Addressing challenging behaviour in the classroom, in Landsberg, E, Krüger, D & Swart, E. (Eds). *Addressing barriers to learning*. 3rd ed. Pretoria: Van Schaik:543-564.

Ragpot, L. 2018. Knowledge of neuroscience in the classroom, in Eloff, I & Swart, E. (Eds.). *Understanding educational psychology*. Pretoria, SA: Juta:139-149.

Reid, G. 2003. *Dyslexia: a practitioner's handbook*. 3rd ed. London: Wiley.

Reid, G. 2005. *Dyslexia*. London: Continuum.

Ruch, W, Weber, M, Park, N & Peterson, C. 2013. Character strengths in children and adolescents' reliability and initial validity of the German values in action inventory of strengths for youth. *European Journal of Psychological Assessment*, 1-7.

Ryan, R & Deci, E. 2006. Self-regulation and the problem of human autonomy: does psychology need choice, self-determination, and will? *Journal of Personality*, 74:6.

Ryan, R, William, G, Patrick, H & Deci, E. 2009. Self-determination theory and physical activity: the dynamics of motivation in development and wellness. *Hellenic Journal of Psychology*, 6 (4):112.

Sapon-Shevin, M. 2007. *Widening the circle: the power of inclusive classrooms*. Boston: Allyn and Bacon:228.

Schurink, W, Fouché, CB & De Vos, AS. 2011. Qualitative data analysis and interpretation, in De Vos, AS, Strydom, H, Fouché, CB & Delport, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik:397-423.

Seligman, M & Csikszentmihalyi, M. 2000. Positive psychology: an introduction. *American Psychologist*, 55(1):5-14.

Shaywitz, S & Shaywitz, B. 2003. The science of reading and dyslexia. *Journal of American Association for Paediatric Ophthalmology and Strabismus*, 7(3):158-166.

Shaywitz, S & Shaywitz, B. 2007. What neuroscience really tells us about reading instruction: a response to Judy Willis. *Educational Leadership*, 64(5):74-76.

Shaywitz, S & Shaywitz, J. 2020. *Overcoming dyslexia*. 2nd ed. New York: Alfred A. Knopf.

Shuttleworth-Edwards, A, Van der Merwe, A, Van Tonder, P & Radloff, S. 2013. WISC-IV test performance in the South African context: a collation of cross-cultural norms, in Laher, S, & Cockcroft, K. (Eds). *Psychological assessment in South Africa: research and applications*. Johannesburg: Wits University Press:33-47.

Smith, S. 2011. Human genetic contributions to the neurobiology of dyslexia, in McCardle, P, Miller, B, Lee, JR & Tzeng, O. (Eds). *Dyslexia across languages*. Baltimore: Paul Brookes:239-253.

Smith, T, Polloway, E, Patton, J & Dowdy, C. 2006. *Teaching students with special needs in inclusive settings*. 4th ed. Boston: Allyn and Bacon.

Snowling, M 2006. Language skills and learning to read: the dyslexic spectrum, in Snowling, M & Stackhouse, J. *Dyslexia speech and language*. 2nd ed. London: Whurr:1-14.

Snowling, M & Stackhouse, J. 2006. *Dyslexia speech and language*. 2nd ed. London: Whurr.

Snowling MJ, Hulme, C & Nation, K. 2020. Defining and understanding dyslexia: past, present and future. *Oxford Review of Education*, 46:4:501-513. [Online] DOI: 10.1080/03054985.2020.1765756

South Africa. 1996a. *Constitution of the Republic of South Africa Act 108 of 1996*. Pretoria: Government Printer.

South Africa. 1996b. *South African Schools Act 84 of 1996*. Pretoria: Government Printer.

Strydom, H. 2011a. Information collection: participant observation, in DeVos, AS, Strydom, H, Fouché, CB & Delpont, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik:328-339.

Strydom, H. 2011b. Ethical aspects of research in the social sciences and human service professions, in DeVos, AS, Strydom, H, Fouché, CB & Delpont, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik:113-130.

Strydom, H. 2011c. Sampling in the quantitative paradigm, in DeVos, AS, Strydom, H, Fouché, CB & Delpont, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik:222-235.

Strydom, I & Lewis A. 2016. Addressing life skills challenges, in Landsberg, E, Krüger, D & Swart, E. (Eds). *Addressing barriers to learning*. 3rd ed. Pretoria: Van Schaik:137-154.

Strydom, H & Delpont, CSL. 2011. Sampling and pilot study in qualitative research in DeVos, AS, Strydom, H, Fouché, CB & Delpont, CSL. (Eds). *Research at grass roots*. 4th ed. Pretoria: Van Schaik:390-396.

Sutton, A. 2011. *Disabilities sourcebook*. 2nd ed. Detroit: Omnigraphics.

Swart, E & Pettipher, R. 2019. A framework for understanding inclusion, in Landsberg, E, Krüger, D & Swart, E (Eds). *Addressing barriers to learning: A South African perspective*. 4th ed. Pretoria: Van Schaik:3-27.

Taylor, N. 2015. *The adaptation of the Wechsler Adult Intelligence Scales–Fourth Edition for South Africa*. Johannesburg. Available at: www.psychologyafrica.com [Accessed 30 May 2015].

Tesemma, S. 2012. A critical analysis of law and policy on the education of disabled children in South Africa. DEd thesis. Pretoria, University of South Africa.

Thompson, L. 2013. Dyslexia: an investigation of teacher awareness in mainstream high schools. Pretoria, University of South Africa.

Thuneberg, H, Hautamaki, J, Ahtiainen, R, Lintuvuori, M, Vainikainen, M-P & Hlasvuori, T. 2014. Conceptual changes in adopting the nationwide special education strategy in Finland. *Journal of Educational Change*, (15):37-41.

Thurlow, M, Elliott, J, & Ysseldyke, J. 1998. *Testing students with disabilities*. California: Corwin Press.

Torgesen, J, Wagner, R & Rashotte, C. 1999. *TOWRE test of word reading efficiency: examiner's manual*. Austin Texas: Pro-ed:8.

UNESCO (United Nations Educational, Scientific and Cultural Organisation). 1994. *The Salamanca Statement and Framework for Action on Special Needs Education*. Paris: UNESCO.

UNESCO. 2005. *Guidelines for inclusion: ensuring access to education for all*. Paris: UNESCO.

UNESCO. 2006. *Convention on the Rights of Persons with disabilities*. New York: United Nations.

Available at: <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf> (accessed on 29 June 2018).

UNESCO. 2012. *Addressing exclusion*. Available at www.unesco.org [Accessed 9 December 2015].

United States Department of Education. 2006. *Individuals with Disabilities Education Act (IDEA) Regulations of 2006*. Available at: www.idea.data.org [Accessed 12 August 2015].

United States Department of Education. 2011. *Individuals with disabilities: Education Improvement Act (IDEIA)*. Available at: www.ideadata.org [Accessed 12 August 2015].

United States Department of Education Office for Civil Rights. 2010. *Guidelines for educators and administrators for implementing Section 504 of the Rehabilitation Act of 1973*. Washington. Available at: www.ed.gov/about/offices/list/ocr/index.html [Accessed 29 August 2015].

Van der Riet, M & Durrheim, K. 2006. Putting design into practice: writing and evaluating research proposals, in Terre Blanche, M, Durrheim, K & Painter, D. (Eds) *Research in practice: applied methods for social science*. Cape Town: University of Cape Town Press:80-111.

Van Eeden, R. 1991. *Manual for the senior South African individual scale – revised (SSAIS-R)*. Pretoria: Human Sciences Research Council.

Van Hoorn, J, Maathuis, C, Peters, L & Hadders-Algra, M. 2010. Handwriting, visuomotor integration, and neurological condition at school age. *Developmental Medicine and Child Neurology*, 52(10) 941-947.

Venter, R. 2012. The implementation of adaptive methods of assessment (particularly amanuenses) at four schools in the Gauteng East District of the Department of Education. Johannesburg, University of Johannesburg.

Venter, R. 2015a. Understanding categories of assessment adaptations, in Dunbar-Krige, H, Venter, R, Nel, M, & Mavuso, M. (Eds). *Guidelines for assessment adaptations*. Pretoria: Van Schaik:63-87.

Venter, R. 2015b. Principles, purposes and nature of assessment adaptations, in Dunbar-Krige, H, Venter, R, Nel, M, & Mavuso, M. (Eds). *Guidelines for assessment adaptations*. Pretoria: Van Schaik:35-60.

Venter, R. 2015c. Administrative procedures with regard to assessment adaptations, in Dunbar-Krige, H, Venter, R, Nel, M, & Mavuso, M. (Eds). *Guidelines for assessment adaptations*. Pretoria: Van Schaik:89-109.

Venter, MA. 2016. Assessment for learning and development. Only study guide for HBEDAAG. Pretoria: University of South Africa.

Wagner, R, Waesche, J, Schatschneider, C, Maner, J & Ahmed, Y. 2011. Using response to intervention for identification and classification, in McCardle, P, Miller, B, Lee, JR & Tzeng, O. (Eds). *Dyslexia across languages*. Baltimore: Paul Brookes:202-213.

Waite, M. 2002. *Oxford South African pocket dictionary*. 4th ed. Cape Town: Oxford University Press Southern Africa.

Walther-Thomas, C & Brownell MT. 2001. Helping schools include all learners. *Interventions in School and Clinic*, 36:175-181.

Walton, E. 2011. Getting inclusion right in South Africa. *Intervention in School and Clinic* 46(4):240-245.

Walton, E, Nel, N, Hugo, A & Muller, H. 2009. The extent and practice of inclusion in independent schools in South Africa. *South African Journal of Education*, 29:105-109.

Ward, J. 2015. *The student's guide to cognitive neuroscience*. New York: Psychology Press.

Wassenaar, D. 2006. Ethical issues in social science research, in Terre Blanche, M, Durrheim, K & Painter, D. (Eds) *Research in practice: applied methods for social science*. Cape Town: University of Cape Town Press:60-79.

Wechsler, D. 2008. Wechsler adult intelligence scale. 4th ed. *Technical and Interpretive Manual*. San Antonio: Pearson.

Wechsler, D. 2014. Wechsler intelligence scale for children. 5th ed. *Technical and Interpretive Manual*. San Antonio: Pearson.

Wehmeyer, M & Field, S. 2007. *Self-determination instructional and assessment strategies*. Thousand Oaks: Corwin.

Wentzel, V. 2016. Primary School teachers' experiences of providing learning support for learners with mild intellectual disabilities. MEd thesis. Pretoria, University of South Africa.

WIAT II UK *Scoring and Normative Supplement*. 2005. London: Harcourt Assessment:53.

Wildeman, R & Nomdo, C. 2007. *Implementation of inclusive education: How far are we?* Available at: www.edletter.org/past/issues/1999-ma/coteaching.shtml [Accessed 12 February 2015].

Winter, E & O' Raw, P. 2010. *Literature review of the principles and practices relating to inclusive education for children with special educational needs*. Available at: www.ncsw.ie/research-report [Accessed 12 February 2015].

Wright, P & Wright, P. 2015. *Key differences between Section 504, the ADA, and the IDEA*. Available at: www.wrightslaw.co/info/sec504.summ.rights. [Accessed 29 November 2015].

Ziegler, J. 2011. Understanding developmental dyslexia through computational modeling, in McCardle, P, Miller, B, Lee, JR & Tzeng O (Eds). *Dyslexia across languages*. Baltimore: Paul Brookes:169-183.

Zirkel, P. 2009. What does the law say? *Teaching Exceptional Children*, 41(4):68-71.

APPENDICES

APPENDIX 1: Ethical Clearance



UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2019/11/13

Ref: **2019/11/13/3844271/22/AM**

Name: Mrs C Yorke

Dear Mrs C Yorke

Student No.: 3844271

Decision: Ethics Approval from
2019/11/13 to 2024/11/13

Researcher(s): Name: Mrs C Yorke
E-mail address: cyorke@telkomsa.net
Telephone: 083 231 7547

Supervisor(s): Name: Prof D Krüger
E-mail address: kruged@unisa.ac.za
Telephone: +27 12 429 4520

Title of research:

Promotion of Inclusion by the educational psychologist through the use of accommodations in independent high schools

Qualification: DEd Psychology of Education

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2019/11/13 to 2024/11/13.

*The **low risk** application was reviewed by the Ethics Review Committee on 2019/11/13 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.



University of South Africa
Pretoria Street, Midrand, 2009, South Africa
Tel: +27 11 471 2000 Fax: +27 11 471 2001
www.unisa.ac.za

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date **2024/11/13**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.


Note:

The reference number **2019/11/13/3844271/22/AM** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,



Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
 motlhat@unisa.ac.za



Prof PM Sebate
ACTING EXECUTIVE DEAN
 Sebatpm@unisa.ac.za

Approved - decision template – updated 16 Feb 2017

University of South Africa
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APPENDIX 2: Proof of Language Editing

CERTIFICATE OF EDITING – MJ MARCHAND

PO Box 35430
MENLO PARK
0102
Tel/Fax: (012) 460 5727
Cell 082 343 0325
E-mail: marchm@iafrica.com

Protea
THE WILLOWS
Pretoria
0081
19 October 2020

To whom it may concern:

I certify that I am a professional, experienced editor, accredited with Unisa, and that I edited the dissertation by Lynette Claire Yorke for a Doctor of Education, entitled “Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools”; supervisor Prof. D. Kruger.

I edited the dissertation for clarity, correctness and flow of language and expression. This included spelling, concord, tense, vocabulary, number, punctuation, pronoun and verb matches, word usage, correct acronyms, sentence structure and consistency.

I also carefully checked the references with the text.

The dissertation left my hands on 18 October 2020.

Marion J Marchand
BA, H Dipl Lib, HED,
Postgraduate Certificate in Editing UP; Accredited Translator (Afrikaans to English) and English Editor, South African Translators' Institute, Full Member of the Professional Editors' Guild; Member of the English Academy

APPENDIX 3: Permission letter addressed to IEB Chief Executive Officer

Claire Yorke

Tel: 083 231 7547

Tel: 011 465 1587

Email: cyorke@telkomsa.net

Request for permission to conduct research at independent high schools

Research Title: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

21 November 2019

[REDACTED]
[REDACTED]
[REDACTED]

Johannesburg

Tel: [REDACTED] [REDACTED]

Email:

Chief Executive Officer

I, Claire Yorke am doing research, under the supervision of Professor Deirdré Krüger at the University of South Africa towards a Doctorate in Education. We are inviting Independent High Schools to participate in a study entitled: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

The aim of the study is to promote the development of inclusive education by the educational psychologist through the use of accommodations in independent high schools.

The benefits of this study are the development of greater awareness of the educational psychologist's potential to embrace and foster inclusion through the use of accommodations. This may have far reaching beneficial implications not only for the learners with accommodations but for the wider community in general.

Independent schools that employ an educational psychologist and have learners, between Grade 9 to 11, who have been granted IEB accommodations have been selected to participate

in the study. Three schools from Gauteng have been selected while 1 school from each of the following provinces has been selected Western Cape, Eastern Cape and KwaZulu-Natal.

The study will entail semi-structured interviews with 6 educational psychologists and 12 male and female learner participants who have been granted accommodations and are in Grade 9 to 11. I anticipate that the semi-structured interviews with the educational psychologists will last for 30 minutes while the semi-structured interviews with the learners will last for approximately 20 minutes. The semi-structure interviews will be audio recorded and will take place individually in the educational psychologist's office, on the school premises. The interviews will be scheduled after the school day to ensure that they do not interfere with the participant's school commitments.

Confidentiality will consistently be upheld and neither the school nor the name of the participants will be mentioned in the research study. The audio recording of the semi-structured interview will be transcribed and coded by me. The electronic information will be stored on an external hard-drive and a computer which will be password protected and have applicable anti-virus protection that is automatically updated. Hard copies of the transcriptions will be stored in a locked filing cabinet in a secure location for a period of 5 years. Future use of the stored data will be subject to further Research Ethics review and approval if applicable. When the five-year period has lapsed, the above-mentioned hard copies will be shredded and the electronic information will be permanently deleted from both the computer and the hard drive by using an applicable software programme.

No risks are anticipated through participation in the study. However, it is acknowledged that participation for educational psychologists may trigger emotional distress or discomfort and it is possible that through participation the learner may experience flashbacks of earlier achievement difficulties. Participants will be provided with the name of a person or organisations to contact should the need for debriefing occur. The cost of debriefing with a professional person would be borne by the participant while there is no cost incurred in debriefing through the given organisations.

There will be no reimbursement or any incentives for participation in the research.

The feedback process will involve informing the IEB Chief Executive Officer, the school principals as well as the educational psychologists and learner participants and their parents of the findings of this research through a report which can be emailed. Any enquires or need for clarification with concern to the findings may then be directed to me in person or via email.

Should you have any further questions with regards to this request, please do not hesitate to contact me, Claire Yorke (Tel: 083 231 7547 email: cyorke@telkomsa.net) or my supervisor Professor Deirdré Krüger (Tel: 012 429 4520, email: kruged@unisa.ac.za).

Please complete the reply slip as a way of indicating your authorisation of the above request. It is requested that the reply slip be returned, within a two-week period, via email to my above-mentioned email address.

Thank you for your time and consideration.

Yours sincerely



Claire Yorke
Educational Psychologist

REPLY SLIP

I, _____ as Chief Executive Officer of the IEB, herewith give my permission/do not give my permission for Claire Yorke to conduct research within IEB schools.

Signature

Date

APPENDIX 4: Permission letter addressed to school principals

Claire Yorke

Tel: 083 231 7547

Tel: 011 465 1587

Email: cyorke@telkomsa.net

Request for permission to conduct research at [REDACTED]

Research Title: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

16 January 2020

Mr [REDACTED]

I, Claire Yorke am doing research, under the supervision of Professor Deirdré Krüger at the University of South Africa (UNISA) towards a Doctorate. We are inviting you to participate in a study entitled: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools. The aim of the study is thus to promote the development of inclusive education by the educational psychologist through the use of accommodations in independent high schools.

The benefits of this study include greater awareness of the educational psychologist's potential to embrace and foster inclusion through the use of accommodations. This may have far reaching beneficial implications not only for the learner with accommodations but for the wider community in general.

Your school has been provisionally selected from a total of 251 IEB schools. In accordance with the stratified random method of sampling and proportional geographical allocation, 3 schools from Gauteng were selected for the study while 1 school was selected from each of the following provinces: KwaZulu-Natal, Western Cape and Eastern Cape. Furthermore, your school has been selected because it is an Independent High School that employs an educational psychologist and has learners, between Grade 9 to 11, who have been granted IEB accommodations.

Ethical procedures underpin this research. At the outset, the research plan was reviewed by UNISA and ethical clearance was obtained. Thereafter, permission was procured from the: IEB Chief Executive Officer. Permission from the school principals is required and consent from the

educational psychologists and parents of learners is needed. Assent will be obtained from the learners. Participants include 6 educational psychologists, who are involved with the accommodations process, and 12 male and female learners who have been granted accommodations and are in Grade 9 to 11.

Should you grant permission for research to be conducted, you are kindly requested to contact the registered educational psychologist at your school who is involved with the accommodation process, and the parents of two learners who are in Grade 9 to 11 who have been awarded accommodations and who will potentially be able to generate rich, detailed information that may best inform the researcher about the research problem under examination. Following your initial contact with the educational psychologist and parents of the two learners with accommodations, it is requested that you provide me with the email contact details and cellphone numbers of these persons by means of documenting this information on the table provided below the reply slip of this document. You are also requested to complete the provided confidentiality agreement with regard to confidentiality of the selection of participants.

Following your provision of the educational psychologist and learner's parents email details, I will contact the above-mentioned persons via email. With regards to the learners, following my contact with their parents, contact details of the learners will be obtained from the parents and thereafter the learners will be contacted via email.

Data from the educational psychologist and learner participants will be collected by means of individual semi-structured interviews, observations and the use of a research diary. With signed consent and assent from the participants, the semi-structured interviews will be audio recorded and later transcribed by me.

I anticipate that the semi-structured interview with the educational psychologists will last for 30 minutes while the semi-structured interviews with the learners will last for approximately 20 minutes. It is requested that you and the educational psychologist avail the use of the educational psychologist's office, on the school premises, for the purpose of these interviews. The interviews will be scheduled after the school day to ensure that they do not interfere with the participant's school commitments.

Confidentiality will consistently be upheld and neither the school nor the name of the educational psychologist or learner participants will be mentioned in the research. More information about the safe storage of data can be provided on request.

Be assured that participation in the study is voluntary and the participants may withdraw from the study at any time without reprisal.

No risks are anticipated through participation in the study. However, it is acknowledged that participation for educational psychologists may trigger emotional distress or discomfort and it is possible that through participation the learners may experience flashbacks of earlier achievement difficulties. Participants will be provided with the name of a professional person or organisations to contact should the need for debriefing occur. The cost of debriefing with a professional person would be borne by the participant while there is no cost incurred in debriefing through the given organisations.

There will be no reimbursement or any incentives for participation in the research.

The feedback process will involve informing the school principals, the IEB Chief Executive Officer as well as the educational psychologist participants and the learner participants and their parents of the findings of this research through a report which can be emailed. Any enquires or need for clarification with concern to the findings may then be directed to me in person via email (cyorke@telkomsa.net).

Should you have any further questions with regards to the request to conduct research at your school, please do not hesitate to contact me, Claire Yorke (Tel: 083 231 7547, email: cyorke@telkomsa.net) or my supervisor Professor Deirdré Krüger (Tel: 012 429 4520, email: kruged@unisa.ac.za).

Please complete the reply slip as a way of indicating your authorisation of the above request. It is requested that the permission form together with the confidentiality agreement be returned, within a two-week period, via email to my above-mentioned email address.

Thank you for your time and consideration.

Yours sincerely



Claire Yorke

Educational Psychologist

REPLY SLIP

I, as principal of _____ herewith give my permission/do not give my permission for Claire Yorke to conduct research at the above-mentioned school.

Signature

Date

CONTACT DETAIL OF PARTICIPANTS

	Name	Email address	Cell number
Educational Psychologist			
Learner's parents	Mother		
	Father		
Learner's parent	Mother		
	Father		

APPENDIX 5: Confidentiality agreement for school principals

CONFIDENTIALITY AGREEMENT FOR SCHOOL PRINCIPALS

CONFIDENTIALITY AGREEMENT PERTAINING TO SAMPLING SELECTION

PROFESIONAL CAPACITY

PLEDGE OF CONFIDENTIALITY

This is to certify that I, _____, assisted in the sampling selection process for the research titled: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools by identifying prospective participants including educational psychologists employed at the school and learners in Grade 9 to 11, who have been granted IEB accommodations.

I undertake to not divulge this information to anyone else other than the researcher of this study so as to safeguard and respect confidentiality of prospective participants.

Signature

Date

Signature of researcher as witness

Date

APPENDIX 6: Consent letter addressed to educational psychologists

Claire Yorke

Tel: 083 231 7547

Tel: 011 465 1587

Email: cyorke@telkomsa.net

Request for consent to involvement in research study

Research Title: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

21 November 2019

Dear [REDACTED]

My name is Claire Yorke and I am doing research under Professor Deirdré Krüger at the University of South Africa towards a Doctorate in Education. We are inviting you to participate in a study entitled: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

This study is expected to collect information that could promote the development of inclusive education by the educational psychologist through the use of accommodations in independent high schools. The benefits of this study include developing greater awareness of the educational psychologist's potential to embrace and foster inclusion through the use of accommodations. This may have far-reaching beneficial implications not only for the learners with accommodations but for the wider community.

Ethical procedures underpin this research. At the outset, the research plan was reviewed by UNISA and ethical clearance was obtained. Thereafter, permission was procured from the: IEB Chief Executive Officer and the school principals and consent from the educational psychologists and parents of learners is needed. Assent will be obtained from the learners.

You are being invited to participate as the study involves educational psychologists that are employed at independent high schools and are involved in the accommodation process. In total 6 educational psychologists, and 12 learners who have IEB accommodation and are between Grade 9 to 11 will be involved in the study. I obtained your contact details from your school principal.

The study, from the educational psychologist's perspective will entail individual semi-structured interviews with the 6 educational psychologist participants. I anticipate that the semi-structured interview with each educational psychologist will last for 30 minutes. The semi-structure interviews will be audio recorded. With permission from the school principal and educational psychologist, the interview will take place in the educational psychologist's office on the school premises and will be scheduled after the school day to ensure that it does not interfere with your school commitments. The questions posed to you will include:

- What policies have you found useful in guiding inclusion and accommodations in independent high schools?
- What is the nature of accommodations available to independent high school learners?
- In what way has your understanding of barriers to learning in reading, spelling and written expression shaped your dealings with accommodations?
- What are your perceptions of the use of accommodations in independent high schools in general?
- What challenges do your experience with accommodations?
- What support may you provide to learners who require accommodations?

Participating in this study is voluntary and you are under no obligation to consent to the participation. If you do decide to take part, you will be asked to sign a written consent form. You are free to withdraw at any time without giving a reason.

No risks are anticipated through participation in the study. However, it is acknowledged that participation by the educational psychologists may trigger emotional distress or discomfort for example recall of difficulties associated with accommodations. You will be provided with the name of a person or organisations to contact should the need for debriefing occur. The cost of debriefing with a professional person would be borne by you while there is no cost incurred in debriefing through the given organisations.

Your name will not be recorded anywhere, and no one will be able to connect you to the answers you give. Your answers will be given a pseudonym and you will be referred to in this way in the data, any publications or other research reporting methods such as a research report, journal article and/or conference proceedings.

The audio recording of the semi-structured interview will be transcribed and coded by me. Member checking will be used to determine the accuracy and credibility of the findings and you will be emailed a summary of the findings and will be required to respond to me, via email, as to the accuracy of the summary. The electronic information will be stored on an external hard-drive

and a computer which will be password protected and have applicable anti-virus protection that is automatically updated. Hard copies of the transcriptions will be stored in a locked filing cabinet in a secure location for a period of 5 years. Future use of the stored data will be subject to further Research Ethics review and approval if applicable. When the five-year period has lapsed, the abovementioned hard copies will be shredded and the electronic information will be permanently deleted from both the computer and the hard drive by using an applicable software programme.

There will be no reimbursement or any incentives for participation in the research.

The feedback process will involve informing the IEB Chief Executive Officer, the school principals as well as the educational psychologist participants and the learner participants and their parents of the findings of the research through a report which can be emailed. Any enquires or need for clarification with concern to the findings may be directed to me via email.

Should you have any further question with regard to this request, please do not hesitate to contact me, Claire Yorke (Tel: 083 231 7547 or email: cyorke@telkomsa.net) or my supervisor Professor Deirdré Krüger (Tel: 012 429 4520, email: kruged@unisa.ac.za).

Please complete the reply slip as a way of indicating your authorisation of the above request. It is requested that the reply slip be returned, within a two-week period, via email to my above-mentioned email address. Thereafter, I will contact you, via email, to arrange a suitable time for the proposed interview.

Thank you for your time and consideration.

Yours sincerely

A handwritten signature in black ink that reads "Claire Yorke". The signature is written in a cursive, flowing style.

Claire Yorke

Educational Psychologist

Return Slip CONSENT TO PARTICIPATE IN THIS STUDY

REPLY SLIP

I, as an educational psychologist at _____ herewith give my consent/do not give my consent to participate in Claire Yorke’s research study at the above-mentioned school.

I have read and understood the study as explained in the email.

_____	_____	_____
Participant’s name	Participant’s signature	Date
Claire Yorke		21 November 2019
_____	_____	_____
Researcher’s name	Researcher’s signature	Date

APPENDIX 7: Summary of school psychologists' personal details

School psychologist pseudonym	Gender	Age	Years of experience as a school psychologist	Years of involvement with accommodations
P1	Female	39 yrs	5 years	4 years
P2	Female	32 yrs	10 years	10 years
P3	Female	59 yrs	25 years	7 years
P4	Female	30 yrs	6 years	3 years
P5	Female	35 yrs	6 years	6 years
P6	Female	47 yrs	7 years	7 years

APPENDIX 8: Consent letter addressed to parents of prospective participants

Claire Yorke

Tel: 083 231 7547

Tel: 011 465 1587

Email: cyorke@telkomsa.net

Request for consent to involve your child in a research study

Research Title: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

2 December 2019

Dear [REDACTED]

Your child [REDACTED] is invited to participate in a study entitled: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

I am undertaking this study as part of my doctoral research at the University of South Africa. I am working under the supervision of Professor Deirdré Krüger. The purpose of the study is to investigate how educational psychologists can promote inclusion through the use of accommodations. There are four major types of accommodations, namely: setting accommodations, scheduling accommodations, presentation accommodations and response accommodations. Typically learners who require accommodations experience difficulty in all or some aspect of the following learning areas: reading, spelling and/or written expression.

Potential benefits of the study include greater awareness of the educational psychologist's potential to embrace and foster inclusion through the use of accommodations. This may have far reaching beneficial implications not only for the learner with accommodations but for the wider community in general.

I am asking permission to include your child in this study as I require information from learners at Independent High Schools, in Grade 9 to 11, who have been granted IEB accommodations. I expect to have 11 other children participating in the study. With regard to selection of learner participants, the process was initiated by the selection of the schools. A stratified random sampling technique was used to select the schools and from a total of 251 independent high schools, 3 schools from Gauteng have been selected for the study while 1 school was selected from each of the following provinces: KwaZulu-Natal, Western Cape, and Eastern Cape.

Thereafter, the learner participants were selected by means of purposeful sampling whereby school principals used their knowledge of the learners to include participants who have the capacity to generate rich, detailed information relating to the research problem.

If you allow your child to participate in the study, he/she will be required to be involved in an individual semi-structured interview. The interview will last approximately 20 minutes and it will be audio recorded. The interview will take place at your child's school, in the educational psychologist's office, and will be scheduled after the school day to ensure that it does not interfere with his/her school commitments.

Any information that is obtained in connection with this study and can be identified with your child will remain confidential and will only be disclosed with your permission. His/her responses will not be linked to his/her name or your name or the school's name in any written or verbal report based on this study. Such a report will be used for research purposes only. The audio recording of the semi-structured interview will be transcribed and analysed by me. Member checking will be used to determine the accuracy and credibility of the findings and your child will be emailed a summary of the findings and will be required to respond to me, via email, as to the accuracy of the summary. The electronic information will be stored on an external hard-drive and a computer which will be password protected and have applicable anti-virus protection that is automatically updated. Hard copies of the transcriptions will be stored in a locked filing cabinet in a secure location for a period of 5 years. Future use of the stored data will be subject to further Research Ethics review and approval if applicable. When the five-year period has lapsed, the abovementioned hard copies will be shredded and the electronic information will be permanently deleted from both the computer and the hard drive by using an applicable software programme.

There are no foreseeable risks to your child by participating in the study. However, it is possible that through participation your child may experience flashbacks of earlier achievement difficulties. Participants will be provided with the name of a person or organisations to contact should the need for debriefing occur. The cost of debriefing with a professional person would be borne by the participant while there is no cost incurred in debriefing through the given organisations.

There will be no reimbursement or any incentives for participation in the research. Neither you nor your child will receive any type of payment for participating in this study.

Your child's participation in this study is voluntary. Your child may decide to participate or to withdraw from participating at any time. Withdrawal or refusal to participate will not affect

him/her in anyway. Similarly, you can agree to allow your child to be in the study now and change your mind later without any penalty.

In formalising your permission, you will be asked to sign the consent form which accompanies this letter and return it to me by email. In addition to this your child must agree to participate in the study and both you and your child will also be asked to sign the child's assent form. If your child does not wish to participate in the study, he or she will not be included and there will be no reprisal.

The feedback process will involve informing the IEB Chief Executive Officer, the school principals as well as the educational psychologists and the learner participants and their parents of the findings of this research through a report which can be emailed. Any enquires or need for clarification with concern to the findings may be directed to me in person via email (cyorke@telkomsa.net).

Should you have any further questions with regards to this request, please do not hesitate to contact Claire Yorke (Tel: 083 231 7547 email: cyorke@telkomsa.net) or my supervisor Professor Deirdré Krüger (Tel: 012 429 4520, email: kruged@unisa.ac.za).

Yours sincerely

A handwritten signature in black ink that reads "Claire Yorke". The signature is written in a cursive, flowing style.

Claire Yorke

Educational Psychologist

PARENT'S REPLY SLIP

You are making a decision about allowing your child _____ to participate in this study. Your signature below indicates that you have read the information provided above and have decided to allow him/her to participate in the study. You may keep a copy of this letter.

Parent's name	Parent's signature	Date
----------------------	---------------------------	-------------

Parent's name	Parent's signature	Date
----------------------	---------------------------	-------------

Claire Yorke		2 December 2019
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Researcher's name	Researcher's signature	Date
--------------------------	-------------------------------	-------------

APPENDIX 9: Assent letter addressed to prospective learner participants

Claire Yorke

Tel: 083 231 7547

Tel: 011 465 1587

Email: cyorke@telkomsa.net

27 January 2020

Research Title: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools.

Dear [REDACTED]

I am doing a study that is entitled: Promotion of inclusion by the educational psychologist through the use of accommodations in independent high schools as part of my studies at the University of South Africa. There are four major types of accommodations, namely: setting accommodations, scheduling accommodations, presentation accommodations and response accommodations. One of the most well-known accommodations is a scheduling accommodation whereby you get additional time when writing examinations.

Your school principal has given me permission to do this study at your school. I would like to invite you to be part of my study. I am doing this study so that I can find ways that your educational psychologist can promote inclusion through the use of accommodation.

The benefits of this study are that it may allow for greater awareness of the educational psychologist's potential to embrace and promote inclusion through the use of accommodations. This may help you and many other learners of your age, with and without accommodation, in different independent high schools. It may also be of benefit to the wider community in general.

This email is to explain to you what I would like you to do. If there are any words in this email that you are not certain of, please ask me or any other adults to explain any of these words that you do not know or understand. Please talk to your parents about this email before you decide if you want to be in this study.

I would like to have an individual interview with you. In total I will be conducting individual interviews with 12 learners, between Grade 9 to 11 that have been granted IEB accommodations. As part of the study, I will also be interviewing 6 educational psychologists that work at Independent High Schools. For the learners, answering the questions in the

individual interviews should take no longer than 20 minutes. The interviews will be audio recorded and transcribed by me. The individual interviews will take place in the educational psychologist's office on the school grounds and it will be scheduled after the school day, at a time that is convenient to you, to ensure that it does not interfere with your school commitments.

I will write a report on the study, but I will not use your name in the report or say anything that will let other people know who you are. Member checking will be used to determine the accuracy and credibility of the findings and you will be emailed a summary of the findings and will be required to respond to me, via email, as to the accuracy of the summary.

Participation is voluntary and you do not have to be part of this study if you do not want to take part. If you choose to be in the study, you may stop taking part at any time without any penalty. You may tell me if you do not wish to answer any of my questions. No one will blame or criticise you.

When I am finished with my study, I will generate a summary of the findings. This can be emailed to you. Any enquires or need for clarification with concern to the findings may then be directed to me via email.

No risks are anticipated through taking part in the study, but if you are unsettled by possibly recalling a time in your schooling, before accommodations, I will provide you with the name of a persons or organisations to contact that will support you.

You will not be reimbursed or receive any incentives for your participation in the research.

If you decide to be part of my study, you will be asked to sign the forms on the next page. If you have any other questions about this study, you can talk to me or you can have your parent or another adult call me at 083 231 7547 or cyorke@telkomsa.net. Do not sign the form until you have all your questions answered and understand what I would like you to do.

WRITTEN ASSENT

I have read this letter which asks me to be part of a study at my school. I have understood the information about my study, and I know what I will be asked to do. I am willing to be in the study.

Learner's name **Learner's signature** **Date**

Witness' name **Witness' signature** **Date**
(The witness is over 18 years old and present when signed)

Parent's name **Parent's signature** **Date**

Claire Yorke  20 January 2020

Researcher's name **Researcher's signature** **Date**

APPENDIX 10: Personal particulars of learners who participated in the study

Pseudonyms	Gender	Age	Grade	History of Supportive Interventions	Types of Accommodations granted by IEB	Current Supportive Interventions
L1	Female	14y	9	<ul style="list-style-type: none"> Informal accommodations: Reader, Spelling, Time Fulltime placement at Remedial Primary School 	<ul style="list-style-type: none"> Additional Time FAL exemption Reader Separate Venue Spelling 	<ul style="list-style-type: none"> Extra Maths lessons
L2	Female	16y	9	<ul style="list-style-type: none"> Occupational Therapy Speech Therapy Remedial Therapy Individual tutor 	<ul style="list-style-type: none"> Additional Time FAL exemption Reader Separate Venue Spelling 	<ul style="list-style-type: none"> Academic support at school when needed
L3	Male	14y	9	<ul style="list-style-type: none"> School support across the curriculum 	<ul style="list-style-type: none"> Additional Time Reader Scribe Separate Venue 	<ul style="list-style-type: none"> Private tutor 4 or 5x's week for concept consolidation
L4	Male	17y	11	<ul style="list-style-type: none"> Fulltime placement in small inclusive school 	<ul style="list-style-type: none"> Additional Time Computer Separate Venue 	<ul style="list-style-type: none"> Support from individual teachers when needed
L5	Female	16y	10	<ul style="list-style-type: none"> Identified as dyslexic in primary school Informal accommodations in Primary School: Reader and Additional Time 	<ul style="list-style-type: none"> Additional Time FAL exemption Scribe Separate Venue 	<ul style="list-style-type: none"> Extra Maths lessons
L6	Male	17y	11	<ul style="list-style-type: none"> Speech Therapy Occupational Therapy Remedial Therapy 	<ul style="list-style-type: none"> Additional Time Separate Venue 	<ul style="list-style-type: none"> Parental tutoring
L7	Male	16y	11	<ul style="list-style-type: none"> Informal accommodations in Primary School: Reader and Additional Time 	<ul style="list-style-type: none"> Additional Time FAL exemption 	<ul style="list-style-type: none"> Private tutor for English

Pseudonyms	Gender	Age	Grade	History of Supportive Interventions	Types of Accommodations granted by IEB	Current Supportive Interventions
				<ul style="list-style-type: none"> Study skills 	<ul style="list-style-type: none"> Reader Scribe Separate Venue 	
L8	Male	16y	10	<ul style="list-style-type: none"> Informal accommodations in Primary School: Additional Time, Reader, Scribe Study skills 	<ul style="list-style-type: none"> Additional Time Reader 	<ul style="list-style-type: none"> Private tutor for Maths
L9	Female	16y	10	<ul style="list-style-type: none"> Extra Maths lessons Reading and Spelling support at external Language Support Centre Informal Accommodations in Primary School, Reader, Separate Venue 	<ul style="list-style-type: none"> Additional Time Reader Separate Venue 	<ul style="list-style-type: none"> Academic support at school
L10	Female	16	10	<ul style="list-style-type: none"> Reading and Spelling support at External Reading Gym. Individual Remedial Therapist Individual Tutor 	<ul style="list-style-type: none"> Additional Time Reader Spelling 	<ul style="list-style-type: none"> Private tutor 2x week for Afrikaans and Physical Science
L11	Female	15y	10	<ul style="list-style-type: none"> Occupational Therapy Speech Therapy Remedial Therapy Extra Lessons 	<ul style="list-style-type: none"> Additional Time Reader Scribe Spelling Separate Venue 	<ul style="list-style-type: none"> Extra lessons at school Peer Tutoring by Matric students
L12	Male	16y	11	<ul style="list-style-type: none"> Psychotherapy when 5yrs old to address hearing loss 	<ul style="list-style-type: none"> Additional Time FAL Exemption (not utilised) Separate Venue 	<ul style="list-style-type: none"> Support from School Enrichment Centre Extra lessons Afrikaans In class support from individual teachers

APPENDIX 11: Transcription of interview with educational psychologist (P1)

	Transcription	Memoing
CY	So, the first one is how did you become aware of the accommodations what took you into that area.	
P1	So, based on my training at University and based on the entire process of becoming an ed psych, assessments have always been an area that interests me.	<i>Uni training assessment</i>
CY	Oh really.	
P1	But I will be honest with you, initially it was something that I completely hesitated on and rejected. But I was very fortunate with my supervisor during my internship year. And she is more of a statistician and she loves this, and she actually taught me how to accurately read the stats.	
CY	Ok.	
P1	What the stats imply and how much difference that could make just getting the right accommodations for kids. That changed my entire perception and now I love doing assessments.	<i>Importance of good accommodation report and interpretation</i>
CY	Oh good. And then the IEB Policy that kind of underpins our applications. How do you find that what could you ... what insight could you give me there?	
P1	Look I think the IEB Policy is fair. There are some areas that need to be tweaked, specifically for dyslexia.	<i>IEB Policy tweaked</i>
CY	Ok.	
P1	I also feel that even though the accommodations become approved and the IEB looks for certain details... the details are in the report but I find and I can understand this with the abundance of accommodations that serve the IEB, but I feel as though only our results are being read.	<i>Challenge IEB review</i>
CY	So too much emphasis on results.	
P1	Ja, and not the actual content of our reports which are extremely detailed and if we read the entire conceptualisation of each case study and each client and the background information and how we are actually triangulating information they would see the motivation for it. I think that needs to be adjusted.	<i>Challenge IEB review</i>
CY	Mmm, Ja no sure, valid point. And then do you ever make reference to international policies for accommodations, I don't know if they ever come past your desk.	
P1	On dyslexia, yes. It has been a very nice interest for me this year. Because I think it was quite interesting to see so many students that I have assessed this year depicted common traits of dyslexia.	<i>International Policy</i>
CY	Ok.	
P1	Too such an extent that I started going to workshops this year on dyslexia. And alarmingly enough the majority of the people attending was speech therapists, not ep's (educational psychologists).	
CY	Aha.	
P1	And I thought, where are we? Why aren't we here. The tests that they discussed there was nothing that we knew about and I think that's the information that we need to collaborate on. We need to learn these assessments.	<i>IEB test battery</i>
CY	What one's did they have?	
P1	There are some on-line assessments, and it is amazing, fully on-line. And they use several batteries of tests, but they do use the TOWRE which we use. But we are only using TOWRE and Edinburgh and	

	Transcription	Memoing
	CTOPPs. They use far more than we use.	
CY	Aha.	
P1	So, with international dyslexia I see it is a little more accommodated. And I thought that is so unfair, and I can understand why you are not given an accommodation for a scribe for maths – you can't and even if you do have a reader, readers are limited to read specific details so if you see a symbol like greater than.	<i>International Policy</i>
CY	Ok.	
P1	You can't say greater than, you can point, but with dyslexia and astigmatism you might not see the greater than or it might be inverted.	
CY	Exactly.	
P1	And how is that accommodated for. It is something I did raise at one of the IEB conferences.	<i>IEB conference</i>
CY	Oh good.	
P1	I felt very dismissed.	
CY	Oh no.	
P1	I did, I did, and the response was she can't do Maths and I thought that was so flippant. And I said excuse me are you going to tell me that you are not going to accommodate the child that has got the ability ... immense ability to become a vet and it was well she is not going to be able to make it. And ok that is a bit dismissive.	<i>IEB dismissive to query</i>
CY	Right. The next one and you have kind of touched on it already, the usefulness of barriers to learning or cognitive neuroscience. So, do you use any of that background knowledge?	
P1	Of course. So, a lot of my academic development has a lot of bearing on neurodevelopmental psychology. And that is the department that I am doing my PhD through.	<i>Cognitive neuroscience</i>
CY	Oh, are you!	
P1	So, I am very much invested in that, so always I am back to the neurodevelopmental disorders. Because being in the High School it is very important for us to track when this disorder challenge actually developed. How long has this child been sitting with this challenge. And it is ironic because most of the student when we go back to which year was the most difficult for you and they say Grade 7.	<i>Cognitive neuroscience</i>
CY	Oh really.	
P1	Grade 7 something changed.	
CY	Interesting.	
P1	It is very, very interesting.	
CY	And then the accommodations at the school. Which ones are being used? Which ones are most prevalent?	
P1	I would say separate venues. So, in alignment with symptoms related to anxiety disorders ... there is quite a bit. And ADHD for concentration difficulties it is there. Electronic readers we now have quite an abundance, because of all of the students that had human readers. And now we know electronic readers are free. It becomes so much more affordable.	<i>Types of accommodations</i> <i>Financial resources</i>
CY	Once you have got that device.	
P1	The students were struggling financially. I find that electronic readers are very popular.	<i>Financial challenge</i>
CY	Oh, good. Technology is starting to click in.	
P1	Isn't that wonderful.	
CY	It is.	
P1	What is sad about that is that a lot of these kids that do have an accommodation for a scribe, they are not using it. Because it costs.	<i>Financial challenge</i>

	Transcription	Memoing
CY	Ok.	
P1	So, I can't wait for that technology to be implemented. The electronic scribe, 'The dragon speaks.'	
C	Ja.	
P1	Where you speak into it and it writes it out for you. That will be an advantage.	
CY	And I hadn't thought of it as a monetary reason for not using the scribes.	
P1	It is huge. Because the parents have already paid us for us to do the assessment. They are still paying the IEB costs and then they have to pay a scribe for every cycle test and exam.	<i>Financial challenge</i>
CY	It mounts up. And then in terms of support that is given to the children prior to the accommodations. So, before they come here, are they typically in a form of support?	
P1	Some do arrive without. The students are very aware that when their peers have accommodations. And now the stigmatism of the accommodations seems to have dissipated completely.	<i>Acceptance of accommodations</i>
CY	Oh good.	
P1	So, I have got clients bringing in another student saying, "I think you can help this person" Okay what is wrong. He never finishes his exams.	
CY	Oh wow. So, they are starting to advocate for themselves and for each other.	
P1	But what is very interesting is that they are often identified by the teachers. They are highlighted through something we call Round Table which is when the student is declining in academic performance the teachers sit together with the parent and the student and they come up with a plan of action.	<i>Teacher, parent, student collaboration</i>
CY	Oh good.	
P1	So, something like a homework diary or attending these after school classes and that sort of thing and often the educational psychologists are invited and then we can say if we think this child should have an accommodation or not. And then we offer that to the parents when they are ready. So, the information is provided to the parents then. So, it works both ways. Word of mouth because of the trust of the students because they notice it is working.	<i>Collaboration</i>
CY	That is good news. And then again, I think that we have kind of touched on the support given to the learner after the granting of the accommodations. So, when the letter arrives back from the IEB what is the procedure then?	
P1	Depending on what the recommendations are I usually do recommend for extra support.	<i>Support initiated/ coordinated by school psychologist</i>
CY	Ok.	
P1	So maybe extra support for Maths or languages like Afrikaans or continuation of seeing a psychologist if it is anxiety related or planning. We do have learning support for Gr 8 and Grade 9. We want to tweak it even further. We find that our accommodation students like attending the extra classes and the one-on-one's much more.	<i>Support programme</i>
CY	So, you offer both?	
P1	Yes, we do.	
P1	So, the one the teachers offer they are here at half past 6 in the morning and they help the students, and they have their groups of students. They avail themselves completely.	<i>Support programme</i>

	Transcription	Memoing
CY	That's amazing commitment. Alright and then the next one ... the challenges that you experience with accommodations.	
P1	It can be daunting. Often some of the challenges are when the accommodations are done externally the external assessor doesn't provide us with the specific paperwork.	<i>Admin challenge external assessor</i>
CY	Oh ok.	
P1	And we need all of those things	
C	So you need your assessing psychologists to be more on-board?	
P1	Yeah yes and just to collaborate with us. In terms of getting the IEB forms completed when you need it to be completed. A lot of the psychologist don't complete the scores. Like I said that sometimes works against the students because it seems as though the IEB focuses on that paper quite a bit. So, for me it is going back and forth – please scan and send it back to me. And it is a process.	<i>Collaboration with external assessing psychologist</i>
CY	Yes, it is time consuming.	
P1	You wait, you also have to wait for the psychologist's details. Sometimes that is not sent as well. Also, the parent's consent. So, there are small admin details that add up to quite a bit of time.	<i>Admin challenges</i>
CY	It eats your time.	
P1	And from my side some teachers you will get all the support you need immediately the others you have to chase.	<i>Collaboration with teachers</i>
CY	Laughs.	
P1	To the extent that I actually just show up in the classroom. So, it is a process.	
CY	Ja its lengthy.	
CY	And then the advantages of the accommodation process. What has kind of been the advantages of them being in place?	
P1	For the student themselves it's the results. The results speak for themselves. The student's complete perception of themselves has changed.	<i>Advantage academic results</i>
CY	Oh really.	
P1	The self-concept has changed.	<i>Advantage personal development</i>
CY	Oh, that is so nice to hear.	
P1	To just see from a student who is getting 37% to getting 57%, its huge. And I had a student who ... what was so touching is that he said to me "I am not dumb, like I guess I am not dumb. I am not stupid."	<i>Advantages Improved marks</i>
CY	Wow.	
P1	He says I could never get it. I felt awful in that classroom so when I got my marks, I felt wow I am not dumb.	<i>Advantages</i>
CY	That's such a good thing to hear.	
P1	And the teachers also give feedback so they will say there has been a complete change, this person is coping. The switch has completely flipped. So, we see it in the results.	<i>Advantages</i>
CY	Ok, good.	
P1	After the student's receive the accommodations and they receive the results there is such a dramatic change.	<i>Advantage</i>
CY	Well then it makes it worthwhile.	
P1	Oh yes. Oh yes.	
CY	Ok. The personal development we have kind of touched on that anything you want to add to that in terms of the learner's personal development.	
P1	They go from this is my leaning challenge it is not my identity and just	<i>Advantage</i>

	Transcription	Memoing
	separating those. I am not ADHD ADHD is something that you know I have to apply, it is with me all the time, but I am not ADHD.I am not dyslexia. Dyslexia is something that I have but it doesn't affect me on a daily basis like I can talk to you and it can be liberating.	
CY	Exactly.	
P1	And also helping students with this learnt helplessness and getting over that challenge. There cannot be learnt helplessness. Now how do we overcome this how do we address this. You have to accept the challenge. So, we have to psycho-educate teachers as well. So once a parent gives us consent to say please let the teachers know that my child has anxiety go easy on him. I go like wowowo, hold on your child does have anxiety but still if your child does not do the work it has to be the same sort of protocol that follows. Otherwise we are achieving learnt helplessness.	<i>Addressing learnt helplessness</i>
CY	Ja I see what you are saying.	
CY	Then in terms of the psycho ed's role in the accommodations process. Can you tell me about this?	
P1	I love the assessments themselves. I love that and especially where you have the background information from the parents and you are meeting with the client and you are assessing the client and suddenly all the dots seem to join so beautifully. So, I think the assessment process itself. And also, the triangulation of information. So, the scoring and the triangulating and background information scholastic history and then just joining those dots to see there's such a pattern emerging. And then also relaying this to the parents. You know it is such a big thing. Some parents they do grieve that a child has a learning disorder, and some parents feel like, oh finally somebody has told me. And sometimes it is so interesting it's not accommodation based it is something like eyesight.	<i>Assessment role of school psychologist</i> <i>Importance of assessment reports</i> <i>Collaboration with parents</i>
CY	Ah.	
P1	So, for me it is the assessment process.	
CY	You have clicked with that.	
CY	And then any changes that you could see with regards to the psychologist's role.	
P1	I think I would like to be more involves in the policy making.	
CY	Policy school or policy IEB?	
P1	Both, I think that we need to have a forum for us. Because it is so different when we are not included in that. And what we see is happening and what we can implement. And in terms of the school, I would like to be much more involved in policies regarding assessments.	<i>Changes in role of psych</i>
CY	Interesting. And improvement in the actual accommodation process itself can you elaborate on this?	
P1	I think it should be on-line.	
CY	On-line.	<i>IEB Process change</i>
P1	I honestly think it should be on-line so we can actually keep a solid trail on it like can we not have more online where we actually click the application form.	
CY	Ja	
P1	And then it goes through that way. You get a ticket when it has been received and you can track. You are able to track the processs as well.	
CY	Ok, you want to track it.	
P1	Exactly so we can see has it been received, it is now serving. We are able to track everything so why not track our applications. It's a	

	Transcription	Memoing
	massive application to track, and if it is on-line and something is missing then you know, "cannot submit". We should have a portal where that is possible.	
CY	I see where you are going.	
CY	Then the next one, can you tell me about the parental view? What is being conveyed to you about accommodations what are the parents saying?	
P1	Some parents are very informed, in terms of some of their kids have already been assessed in primary school. So, some of them are aware of the process. However, saying that there has been a very humousistic about it where I would get a request for accommodations for "extra time" and separate venue please. And it doesn't work like that.	<i>Parental expectation</i>
CY	Oh, really because they had it in prep school?	
P1	Yes exactly. So, it works two ways, and you get a lot of it. And I am ok that's not how it works. So, I have to do the whole assessment. The most funniest response I got is "What is the quickest process?".	<i>Parental pressure</i>
CY	They want the short cut.	
P1	And I said this is the quickest way. And we have to explain that the primary school reports don't do for High school. And there are so many things that could have changed, and your child could have addressed a problem and not experience that anymore. I also find that parents are way too overconfident about the process.	<i>Collaboration between Prep and High School Parental pressure</i>
CY	In terms of their expectations to get the accommodations?	
P1	Yes, so those are the parents who have previous accommodations. But the parents who have never thought about this are actually quite fascinated. They had no idea this existed. I would say they are very grateful there is a lot of gratitude.	<i>Parental appreciation</i>
CY	Then the last one, anything from the broader community about the accommodations that you think is valid?	
P1	I think our grade heads are very much aware and they work quite closely with us. Our grade heads are very supportive about the process. And I tell them that it is a very long process.	<i>Collaboration with heads</i>
CY	Good well those are interesting things and that is the end of the questions. So, anything that you want to add, anything that hasn't been touched on?	
P1	I think that you got quite a few points.	
CY	Well then thank you. I so appreciate this, especially at the end of a busy year and I am going to stop this recording now and wish you a really wonderful holiday.	

APPENDIX 12: Transcription of interview with educational psychologist (P2)

	Transcriptions	Memoing
CY	So, thank you (name). If you are ok, let's just go from the start of the questions. How did you become aware of the accommodations?	
P2	So, I have been at (school) for 8 years and I knew about accommodations from my training at university. I finished my internship and then I came here 8 years ago, and they already had accommodations set up here. So, we have been running it for a while. So, I think accommodations are kind of part of the fabric at the school here, so it's been part of it for a long time.	<i>University training</i> <i>On-site-knowledge</i>
CY	Ok accommodations and inclusion are part of it.	
P2	So, we have been doing it for 20 years now, so we have a 20-year inclusion programme. So, it has been a while	
CY	Amazing, ja. And then the usefulness of the IEB Accommodations Policy, can you tell me a bit about that.	
P2	I find it very useful. It's a nice reference point for parents as well so often we will have kids who don't necessarily need accommodations querying it and I think parents and students don't always understand where accommodations come in. So sometimes you will get students who have 80% and they want to push it to an 85% and then they will say, I need extra time. And then it is not just the school being mean and saying no you can't have extra time because you are a high achiever, but it is actually unpacking well we need a history, and so what I start with before I even refer for an assessment is at a meeting with the parents and I send them a copy of the policy and then I say please bring me any documents to the meeting and often when they are unable to bring any historical evidence and any examples then that is when I refer to the policy and say you know the IEB is really not going to grant these accommodations if we don't have evidence of your child's need for it.	<i>IEB policy positive regard</i> <i>Collaboration with parents</i>
CY	Ah ha.	
P2	And then the purpose of accommodations isn't to give your child extra marks to get into medicine it actually has a function. And I think because the parents often think you are just being mean.	<i>Parental pressure</i>
CY	And there are such high stakes on the exams.	
P2	Yes, and everyone can't have extra time or other accommodations. And sometimes we get like silly requests, that having a formalised document helps to get the parents to understand that there is a process. There is a formal process and what is helpful for me is having a policy that is external to the school that they can actually refer to.	<i>IEB Policy</i>
CY	And in terms of the policy update how has that been for you?	
P2	I think that there have been great updates over the past few years, and it has definitely made progress from the initial application. I don't really see a gap in what else could be added. I think that it is a thorough application, but I think if the policy came out at the beginning of the year of the end of the year. I think it's quite difficult when you don't know when it is going to come out. And last year I think it was twice in one year that there were revisions and it's hard to keep track.	<i>IEB Policy update, positive</i> <i>Challenge keeping track of update release</i>
CY	And do you have to access the website, or do they send the updates to you?	
P2	So, because I am registered as getting all the circulars, so the email comes directly to me.	
CY	Ah ok, that is good.	

	Transcriptions	Memoing
P2	But what I think is tricky is for the psychologists that we refer to and so it's remembering to send on the policy and particularly the policy changes to our referral psychologists and also to our prep school, so that they also aware of the policy updates.	<i>Collaborate with referral psychologists and prep school</i>
CY	You have got a lot on your hands.	
P2	Ja.	
CY	And then onto the international accommodation policies. So, can you tell me about this.	
P2	So, we have drafted together our own internal learning policy and we have drawn together a lot of legislation like White Paper 6, The Children's Act that sort of thing, so we have internally a learning and teaching policy which is for our whole campus of 5 schools. And so, there is a lot in that policy.	<i>Knowledge of internal inclusion policies</i>
CY	Ah ha.	
P2	But part of it speaks to our inclusive process. And what we have done on that is that we also have an academic support policy. And what has been helpful is to ... so we have 6 categories of support that we talk about. And we have moved from levels to categories, so it is not a hierarchy, but it is an additional reference point to help us with inclusive candidates. So, Category 1 is our extension students. Category 2 is just your student that can cope independently with their schoolwork, they have no support needs. Category 3 is mild support, so that is students who need short term often skills-based intervention, things like time management, organisational skills. They are not going to be on a long-term support programme and that is managed at the teacher level, extra lessons, where it is just subject specific. And then Category 4 and 5 are our truly inclusive candidates, so that is where students have moderate support needs and Category 4 and 5 are where accommodations come. So, it is accommodations and on-going support and monitoring and there's a number of interventions. And in Category 5 that is where we are putting them on IEP, so they have accommodations plus other modifications to their curriculum. And then Category 6 is where participation isn't possible. So those are kids that we have actually walked a long journey with, and we have done all the other support and the child is still not able to cope in our context.	<i>Categories/levels of support</i>
CY	Ok that is a lot.	
P2	And so that is our internal policy and we have drawn this from many others.	
CY	And the international policies, we have children moving in and out from other countries, have you come across any international policies.	
P2	Um, not really.	
CY	And then with regards to the barriers to learning and the cognitive neuroscience aspects, can you tell me how this has guided and informed your support programmes?	
P2	It definitely does guide us. So, I am part of the academic support cluster for the schools in the area, well in Joburg, Gauteng, so we have cluster meetings twice a term. Which is also quite helpful for schools to also share resources.	<i>Role of psychologist</i>
CY	That's fantastic.	
P2	And then I just ensure that my own cpd is up to date and in line with those things, so it's the cluster meeting and my own interests.	<i>On-going training</i>
CY	Are the cluster meeting for support prep school or high school?	
P2	They are both, so it has opened up some interesting areas because a lot of the Prep Schools aren't aware of the IEB Policy and the	<i>Collaboration with prep school</i>

	Transcriptions	Memoing
	requirements coming into High School and then the High Schools can be very entrenched in that policy so that connection is actually helpful.	
CY	Ja, I am sure. Good. Ok and then the accommodations that are used at your school. Could you just run through that for me?	
P2	So, we have extra time, separate venue, rest breaks, readers and spelling, computer.	<i>Types of accommodations</i>
CY	Ah ok, so kind of across the board.	
P2	But the most used is extra time and we have a fair amount of separate venue kids. So, we have a large amount of girls with a separate venue	
CY	So how you manage that?	
P2	We don't have 26 spare offices. You have to make a plan.	<i>Separate venue challenge</i>
CY	Ok and then we have spoken about how you support with all your levels so the next one is the challenges that you have experienced.	
P2	I think the challenge for us has been timetables. So, we have the policy that if the child has been granted the accommodations they can use if for any test and any exam. And I know a lot of schools say only exams, but the child has been granted it for a reason and then there is the difficulty of having to plan extra times.	<i>Timetabling challenge</i>
CY	Not easy.	
P2	The difficulty is there is a knock-on effect. If the child is using their extra time and runs into the next lesson then either they are disrupted if they are in the regular venue or the teacher is frustrated because she has to go teach her next class, the venue is used for other things and equally we can't have all of them in a separate venue. So, we have been talking about 'how can we do it better' and our policy with teachers is that they can't set a test for the same amount of time as the lesson is. So, they need to set the test for shorter so that there is a buffer period of that.	<i>Timetabling challenge</i>
CY	Oh, how clever.	
P2	No one sticks to that. It's the morning middle lessons, that is sandwiched between the two others that is the problem. So, I think that that is one of the biggest challenges.	
CY	I am sure. So, then that is the timing challenge.	
P2	And I think that our other biggest challenge is venues. So, at the moment the separate venue girls write in a big room and they aren't in little cubbyholes, so they are in a computer room and a classroom where the door opens, but I can be quite flexible in their seating. So, they can say to me I want to face a wall. But they are all in one venue. So, Grade 8 to 11 are in one room and then we put the Grade 12's in a separate room. It works, I mean we have had the odd child that has wanted an individual venue. We have a child at the moment that has seizures quite frequently and she needs to be in an individual venue. An in that case the parents pay for their own invigilator.	<i>Separate venue resource challenge</i>
CY	Oh ok.	
P2	Ja, so the amanuensis and the private invigilator are at the parents' expense. So, we use a company. I liase with the company and they get billed. I train the person and the parents are billed. It's a huge expense for parents but the parents have bought into it just because we don't have staffing. And you want the one specific person who is reading and scribing for them.	<i>Support from community</i> <i>Financial challenge</i>
CY	That is one of the pluses of living in Joburg.	
P2	Absolutely. It's a huge expense for parents. So, the parents have bought into it. Just because we don't have the staffing and you want	<i>Financial challenge</i>

	Transcriptions	Memoing
	the one consistent person who is scribing and reading for you. With this particular child, she uses the c-pen in class but she is quite severely dyslexic and extremely anxious and has lots of anxiety diagnoses and for her when we tried the technology for scribing she just wasn't able to express herself in the same way.	<i>Barrier to learning, dyslexia</i>
CY	Ok, ja so maybe technology is not for her.	
P2	And we have explored different technology and I think the voice to text we are just not there yet in terms of the right kind of technology.	<i>Technology support</i>
CY	Ok, so those are the challenges and now onto the advantages of accommodations.	
P2	I think it has been a huge advantage to have the accommodations. You know I have seen some kids that are so bright and so capable, but she isn't able to actually display her knowledge.	<i>Work to potential Improved marks</i>
CY	Ja.	
P2	Ja hugely beneficial and to see the kids marks change and their confidence change when we implement the accommodations.	<i>Advantages increased marks and confidence</i>
CY	So, are you seeing academic improvement?	
P2	Ja, definitely. And improvement in confidence as well. And my goal in High School, and what I say to the parents is by the time they Matriculate they need to be able to manage their learning needs with independence and resilience because the university world and the working world, is not going to necessarily coddle them. So, the accommodations are helpful, and we find that many of our girls get the same accommodations at the universities. But it is how can they use the accommodations to manage their own learning needs going forward. And what can they do for themselves.	<i>Improved confidence and marks</i> <i>Learner resilience and independence</i>
CY	So, you are helping them to become independent. Ok, so that is the pluses. So, the marks and then also their personal development.	
P2	Yes, and there's a team of teachers that always work in the separate venue and they are on board. I keep the same people. And they understand why they have the accommodations.	<i>Support from teachers</i>
CY	Sure. And do you feel that you are getting there with your staff?	
P2	Yes, I do. I keep the same people for consistency, as well.	
CY	And then the next one. The educational psychologist's role in inclusion and accommodations. Can you tell me about this?	
P2	Ja, so my role, we are 3 educational psychologists here. So, what we have done is 2 of them focus on the well-being and wellness side of things	<i>Role of ed psych split</i>
CY	Ah ok.	
P2	So, the one is particularly involved in therapy and counselling and the other one is particularly involved in group interventions in Grade 8 and 9, but also does therapy and counselling. And then my role is in academic support, so I have specialised more around the kids with learning difficulties and with medical conditions. And I think that in our context, it has grown so much, so it was one person doing all 3 of those roles but it's grown so much that it actually couldn't be one person. Um, I co-ordinate academic support. I have a team of people under me that help me with the accommodations and the skills-based interventions and that sort of thing.	<i>Emotional support offered at school</i> <i>Coordinator role of psych</i>
CY	So, what would that typically involve what?	
P2	So, it's invigilating separate venue tests and exams, its extra lessons, its study skills. So, I have got a study skills specialist in my team. I've got a Maths support teacher and an English support teacher. So, it is skills intervention for the kids. And my role is a coordinator role so I	<i>Role of psych</i> <i>Support from teachers</i>

	Transcriptions	Memoing
	case manage the more intensive cases, particularly those that have a more psychological nature and I do all the IEB accommodations. I keep stats on the kids using accommodations and the kids we have in support.	<i>Coordinator role of psych</i>
CY	Oh, that is amazing.	
P2	And then I work at a very systemic level, so I chair our campus learning committee and our campus academic support committee.	<i>Systemic support</i>
CY	Ok.	
P2	And the other people in those committees aren't educational psychologists. There are academic heads and support teachers and then my role is around systemic intervention. So, I am the only educational psychologist. So, it's about the policy development, and bringing the psychoeducation into the system.	<i>Systemic support</i>
CY	So, you have a big job coordinating all of that. And the accommodation assessment do you do those?	
P2	So, I don't assess and the reason being I prefer to have a neutral assessment done. So, I refer to a neutral person, where it's brand, new fresh eyes on the child.	<i>Accommodation assessment</i>
CY	It makes sense. Ok, so you have told me about your role. And then our next question is the changes. What changes would you envisage in the process?	
P2	For me, I think it would be helpful for the IEB to have training on their Accommodations policy not only for schools but external psychologist as well. You know psychologists in private practice, I can suggest to the people on my referral list; here's a workshop on IEB policy and then they can attend. So, workshops for the assessing psychologist would be fantastic. Because the workshops for schools are more logistics. So, its logistics in terms of rolling it out within your school.	<i>IEB Policy training for assessing psych</i>
CY	Ja.	
P2	So, we have put together a good list for our referrals, but sometimes you will get a report and I think this person has no clue. If they don't know the IEB policy and I think that people take on the referrals thinking it is simple and it is not. And then the parent's expectations are that the child is going to get these accommodations.	<i>Accommodation assessment Poor report Parental pressure</i>
CY	Ah I see that is difficult.	
P2	And then we have to be the mean guys to get the feedback from the IEB to say like... you are really not going to get this. Then say the IEB has denied it and this is the reason why. I think my suggestion would be that there needs to be more training for external psychologists and it is difficult for us as a school to run that, so as a school I can only train the psychologists that I refer to. But sometimes the parents choose their own psychologist. Which they are entitled to do.	<i>Training for assessing psychologist</i>
CY	So, a specific branch of training?	
P2	Yes, specific training. And the parents have paid a lot of money to take their child for an assessment. So sometimes they chose to without going with our referral list, but it would be helpful to know that there is something to refer the psychologists to.	<i>Cost of assessment</i>
CY	Ja, sure they are expensive tests. And there is a huge range in what people are charging.	
P2	And sometimes they will go to someone who doesn't use all the testing tools and then you have to say that to them, after they have spent a lot of money.	<i>Poor report Financial challenge</i>
CY	And the next ones, the parents' views on accommodations. What feedback do you get?	
P2	Because we have had accommodations for a while, and we have them	<i>Acceptance of</i>

	Transcriptions	Memoing
	in all of our schools. I think the kids are quite used to it. They are used to some kids having accommodations. So, I think the kids are quite responsive. We've have had mixed reactions from parents, and so the tolerance and the kindness come from home. I think it is really mixed reactions and it depends on the family as well.	<i>accommodations</i> <i>Parental influence</i>
CY	And then the last one the opinion of the community. Any feedback from the community about accommodations.	
P2	Well we don't really get a lot of feedback from the universities. We have a contact list for who does accommodations at the universities. So, we don't really always get the feedback to follow up.	
CY	Ah thank you. Is there anything that I haven't asked that you think I should know?	
P2	I think that is all.	
CY	Ok well those are all the questions. Thank you so much.	

APPENDIX 13: Transcription of interview with educational psychologist (P3)

	Transcription	Memoing
CY	Hi thanks so much for agreeing to do the interview with me. I really do appreciate it. The first question is how did you become aware of the accommodations?	
P3	Mainly at (previous school) and as they moved and we became a high school when we approached Grade 10 then it became very relevant and so that is when I started getting into it and then through my reading group.	
CY	Ok alright	
P3	And then in my private practice I went into it and would have one or two IEB kids.	
CY	Ja and then the usefulness of the IEB document.	
P3	The policy?	
CY	Ja the policy.	
P3	Yes, I do and every year I wait for that update or wait to see what it is. I think that in many ways it's the standard I live by when it comes to accommodations because I don't get much from (other boards) in terms of any other kids I'm seeing. There isn't anything as explicit that is as user friendly or as guiding in terms of what you can apply for when it's appropriate. No, I find the IEB documentation very useful.	<i>IEB Policy useful</i>
CY	And accessing it?	
P3	I have to check whether it is updated. So, I do keep on asking. I either ask the IEB directly or I ask friends if there has been any change yet. I sort of expect it around about the end of the First Term.	<i>IEB Policy update challenge accessing</i>
CY	So, you have come to expect it almost every year.	
P3	Yes, I have. Because one year I think that I was caught out. I didn't know that it had been updated.	<i>IEB Policy update challenge</i>
CY	So, it's been a bit sporadic? And the test battery?	
P3	In terms of the assessments we are hoping that they will update some of it. Like the Edinburgh. I worry about that because of the kids that I am seeing. I tracked lots of kids that are in the dyslexia realm and a lot of them do so well on their test, but I know they are not functioning.	<i>Test battery</i>
CY	I think that is very relevant, multiple choice makes it a lot easier.	
P3	And so, I always contrast what they get for the Skimming to what they get for the Comprehension because there is a huge disparity there.	<i>Test battery</i>
CY	And then the Skimming boosts the overall score.	
P3	So, for a while I was a little bit obstinate and I would only put down the ages because they would come out very low. But they said to me stop putting the age, but I still relate it back to that sometimes. I say ja this is the standard score, but this is the age score.	
CY	Ah ha.	
P3	I worry maybe just on that matter I think I go through stages so are they reading my report are they reading the little detail that I am putting in there. So, you know that summary page, I put lots of stuff in there. That one little block I will put in previous history and then stuff at the bottom saying other tests that I have done with them just to try and facilitate.	<i>Fairness of review of application</i>
CY	I agree with you that the summary sheet is becoming more and more where you want to capture the information.	
P3	It does make sense to me I think that if I was on the board, I would be saying do I have to read 50 pages to get all this info. It would be nice if I had a summary.	<i>Report review</i>

	Transcription	Memoing
CY	Ok.	
P3	Ja what I try and do these days is to make sure I do my background information as fully as possible and my summary and conclusion. I try and make sure that I really pull it together there to try and link those high scores and low scores.	<i>Report strategy</i>
CY	In terms of replacing the Edinburgh is there any test in mind?	
P3	The only one that I can think of that might work is the GORT because it has the oral that you can compare.	<i>Test battery</i>
CY	That's interesting, anything else about the IEB tests?	
P3	Well yes, I use the York all the time with the little ones, but I haven't seen it for older ones. I use it up to Grade 6 but the scores are very inflated cos they just use their language skills, so I get a low score on accuracy and a high score on comprehension. I quite like the WIAT stuff and I use that now. The oral reading fluency cos there I have started to bring in their dyslexia portfolio, the index from the WIAT. But I know some of my colleagues say they find the WIAT a bit hard.	<i>Test battery challenges</i>
CY	Ah ok. And then the next question is any international policy that you have come across that may be useful to you.	
P3	I have had a few kids that have either come from British schools or American schools. They are very similar and with the WISC and slightly different when it comes to the scholastic but in terms of the process it is very, very similar. And then obviously lots of kids that immigrate where I need to provide information and I have used the IEB stuff as my standard.	<i>International accommodation Policy</i>
CY	Ok.	
P3	I say well this is what we have, and I have never had any come back from that. I don't know if the kids end up having to do more assessment when they get there.	<i>International Policy</i>
CY	I think that you would probably hear from the parents, they would be onto it.	
P3	Ja.	
CY	And then the next on and obviously this is really pertinent for you because you have such a history with working with barriers to learning. How does your knowledge of barriers to learning help inform your support? And then the neuro-cognitive information does this help at all?	
P3	I think that it is always something, and I am just thinking of a school that I went to last week. But again just because of the lack of information I could quote from the IEB Policy with regards to the barriers that this child has and the way she should be accommodated. So, I ask for all of those in my report. I do find that the information on the barriers I used it (policy) with the Grade 4 teachers where I could say what they may still qualify for. You can't discount the fact that they have difficulties just because they do well on one or two activities and then I can show them these are the kinds of accommodations they may be able to have.	<i>Barrier to learning</i> <i>Barriers to learning relates to accommodations</i>
CY	So, accommodation knowledge is filtering into the lower grades?	
P3	Here I am quite impressed with how it is moving. The school has bought into accommodations. The High School is still quite strict as to when they allow it (accommodations) and when they don't allow it and they were inclined to let the children be in Grade 8 and flounder for 6 months because they want to get to know the child. And ja I get that, but I don't think it's always ok.	<i>Accommodation in prep school</i> <i>Challenge of delayed implementation</i>
CY	So, case by case. And, then in terms of accommodations that are used at your school. Is there anyone that stands out that often comes up?	

	Transcription	Memoing
P3	I think time is the most common. And they do that pretty well here because what they will do for the control tests in High School is everybody who has accommodations goes to one venue and then within that venue is extra time. So they know to come 10 minutes to 15 minutes earlier and then she (the teacher) has it set up on the computer/board and there time starts and kids with readers or scribes also congregate there and then they pull in people therapists or teachers, and then from there they go to venues.	<i>Types of accommodations</i> <i>Organisation of extra time accommodation</i>
CY	Well that is fantastic and sound very un-stressful for them.	
P3	What they also do in the exams and it works quite nicely is that they do it in the hall and they use the upstairs gallery and the kids with extra time use that, with their desks facing backwards, and it works pretty well.	<i>Separate venue resources</i>
CY	And again, this one you have a foot in both the prep and the high school so the support that comes up from prep school do you think it is relevant to the children? Do you find that they get the same accommodations?	
P3	Yes, to a large extent. One did not get last year but I knew we were not going to and that made perfect sense because she did not have a reading problem. She got extra time. They don't always easily do the separate venue for the Grade 8/9 they will say we are committed to doing it from Grade10.	<i>Correlation between Prep and High School support</i> <i>Separate venue challenge</i>
CY	I am hearing that it is really hard to accommodate everyone and to put all of this in place.	
P3	When I was at my previous school there were companies that provided scribes but here they use out sourced people for scribing.	<i>Local community support</i>
CY	Do you think a move to more electronic scribing would help?	
P3	They are not all happy about the electronic but now some (personal name) are going to need it so we are lucky.	<i>Technical support</i>
CY	Do they use any other form of technical support?	
P3	Yes, the pen, I like the pen and they do use the pen in the High School, but some kids don't like it.	<i>Technical support</i>
CY	Ja, ok so some want the portal or the pen and others like the person.	
P3	One of the things that I am trying to get them to be more independent because remember that one workshop where the universities came, and they all said the kids must be independent.	<i>Importance of learner independence</i>
CY	That's right.	
P3	You know, every time, I put in an application (IEB) cos I do all the applications from here every time I try and justify as well as I can, but I always get worried. And the one time I put in for an exemption and I really felt it was needed and it didn't come through.	<i>Accommodation application</i>
CY	Did you appeal it?	
P3	Yes, and it went through. But I am always so scared because parents put so much hope in it.	<i>Parental pressure/hope</i>
CY	It is high stakes.	
P3	Yes, but we all come across them the parents that try and take chances, so I had one that applied in Grade 12. No matter what I said. Nothing was granted. I have got one at the moment that is in Grade 11 that came to me last year and I said no, you are not going to get it. And now they are insisting that I do, and I will see him next week. There is no grounds for him to get an exemption. You know, so I have said to the school. The school don't like it if I apply and we don't get it. They don't want us to get a reputation for applying too much. But anyway, so they give me the 10 th degree. Will they get this? Will they get that? You	<i>Parental pressure</i>

	Transcription	Memoing
	don't always know.	
CY	You don't and there are sometimes surprises.	
P3	Yes, yes. And this time the one that is coming my gut feel is that we are not going to get it, but the parents are insisting.	<i>Parental pressure</i>
CY	Sometimes the background history is important for an application.	
P3	He has a nice background he has a fulltime remedial history, but he achieves fine.	
CY	It is hard sometimes.	
P3	Yes, and the other thing is that I have learnt is that I have to be very careful with the teachers who are going to write the reports. That they really do understand the process and what in a sense it could mean for the child.	<i>Collaboration with teachers</i>
CY	Ok, so the teacher's contribution is important. And then some of the prevailing challenges for accommodations?	
P3	You know it's teachers. Teachers, there I had it again yesterday the weird things you get like it's all very well if they get a spelling accommodation, but if they copy a word incorrectly, I am marking it wrong. Ok! Then this week I had "Oh no they will get all the accommodations". We've got a kid in Grade 7 that is using a pen she can use that pen anytime except in a reading test.	<i>Teacher challenge lack of understanding</i>
CY	Why not the reading test?	
P3	So, I said what reading test? so she said comprehension. So, you know they can misunderstand. So, I think that for me is one of the fundamental frustrations with being able to get the education and what does it (accommodations) mean and how do you do it.	<i>Teacher challenge misinformed</i>
CY	Ok.	
P3	I have found with teachers that if you can show them how to do it then they are fine. Its more that fear, but how am I going to do this. Or how am I going to justify this. That this child has got this accommodation, but others don't.	<i>Teacher challenge</i>
CY	And the teachers form (IEB) do they find that useful?	
P3	I think that it is disregarded by them.	<i>Teacher challenge</i>
CY	What would be better?	
P3	Well, I put in all that I can on the form – the child's name the accommodations applied for all the details and I put it in a word document so they can just access it and type it cos I know if I give them the hard copy I wait forever for it.	<i>Teacher challenge</i>
CY	Ah ok.	
P3	And then there is a liaison person (name) and she is wonderful she just sits on them all the time and she goes and gets the file with all the tests and everything in. But I don't have an answer for that form. But I think that the report that they are filling in is too superficial in a sense for them to grasp that this is actually something serious. You know that we are doing this for a good reason. We are not just trying to get a child who is lazy an accommodation.	<i>Collaboration with teacher Admin challenge</i>
CY	Ok well that is worth thinking about.	
P3	When I give them a teachers form to fill in for me. I try and give them a tick box thing.	<i>Admin challenge</i>
CY	So, more tick boxes?	
P3	It might be. It is less admin for them. Tick boxes and then justify.	
CY	So those were the challenges and then the advantages.	
P3	They have really made a huge difference. It really, really has. There are numerous kids that I come across that just with that	<i>Personal development</i>

	Transcription	Memoing
	(accommodations) and from this nervous wreck until she finally got her accommodations, huge difference.	<i>advantage</i>
CY	So, there is the calming.	
P3	The calming from anxiety. She is bright you know, and she is able to show off what she is capable of.	<i>Personal advantage and work to potential</i>
CY	And was that mainly the separate venue that gave her that or did she get time.	
P3	It was the exemption for her. Very big.	
CY	Because they are spending so much time in trying to get their pass mark.	
P3	Exactly. The amount of energy and even though I would say to them don't stress about it lets worry about your other things it just remains a stress. The one thing that I came across last year for the first time, was a child very severely dyslexic who I applied for Afrikaans and Maths and they didn't get both of them. And in a sense, both were equally justified.	<i>Stress prior to accommodation</i>
CY	What didn't she get?	
P3	The Maths. But the school had already told me and her parents that if she got both she would have to leave. She would have to go somewhere else cos they wouldn't be able to accommodate her. So, in a sense it was ok because they accommodated her. And I suppose also when I thought about it Maths Lit is a good option.	
CY	It is a good option.	
P3	Exactly, so what I have been doing I have been saying in those cases is to sometimes do the endorsed so we did that quite successfully but now last week while I was at a government meeting they told me that the government has done away with the endorsed.	<i>Government regulations</i>
CY	I don't know if the government has done away with it.	
P3	They had been told at their district meeting My suggestion was to go back to their district and just say can't we get this one through.	
CY	Where are we up to. And then with regards to the learners anything that stands out as having the greatest impact from getting accommodations	
P3	Just the relief. That is what I hear all the time.	<i>Advantage relief</i>
CY	Then the role of the psychologist in accommodations. We have touched on this can you tell me a bit more?	
P3	I volunteered to be the person who would do the applications because I had done it before. So, I knew the process. Sometimes I rue that decision because it is hours of work to get that whole thing together. I have had a bit of pressure taken off me cos now I don't have to submit the exam/test booklets so I think it will go a bit easier now.	<i>Admin/Time challenge</i>
CY	How are you finding the online submission?	
P3	Fantastic its absolutely fantastic.	
CY	And the turn-around time?	
P3	That has been good in most cases. We had one last year that took a while I am not too sure what happened. What I have found is that I must be quick to phone and say cos I have done that twice now and then as soon as I phone in and say I haven't got one then it came through very quickly.	<i>IEB helpful</i>
CY	So, any refinements that you could see in the accommodations process?	
P3	No, I am very happy with it.	<i>Positive about IEB process</i>
CY	Great and changes for you in your role. Is there anything that you	

	Transcription	Memoing
	would like to do differently.	
P3	I tried to do the Grade 8's earlier in the year because of the pressure on the kids. So, we did that last year and for them it didn't work because the teachers didn't know the kids well enough. So, we try to do it at the end of the first term. So, I did the assessments in the first term, but they hadn't had an exam session, so they are waiting now. I have a few that I assessed last year but we can't let 6 months go. We can't let 6 months go by for the scholastic side of it.	<i>Timing of application challenge</i>
CY	You know that the academics has been increased to hold for 1 year?	
P3	No ... has it?	
CY	I think it was in the last update.	
P3	Oh, is that so – so it is a year.	
P3	I am so glad to hear that. So, I don't need to stress. Ok good. With the intellectual I have a problem ethically when the SSAIS has been used and I know I can get more from the WISC – like the processing speed.	<i>Test battery</i>
CY	And then the processing anything with the process that you think well that could be refined?	
P3	I can't say that I felt that. Maybe just because I am so used to the process. That I know what to do and what is expected. No, I haven't felt as if there is something unnecessary	<i>Accommodation process positive.</i>
CY	Good. And then the last on feedback, obviously it is not just the child but their environment. What kind of feedback are you getting?	
P3	I think parents are a strong motivator for this and so I have found the school and I have seen the change since I have been here there has been a huge shift. There are no little things where they would be saying we can't take in too many kids that are going to need accommodations where we can give them accommodations in the entrance test and we are getting there with the high school. The one teacher has changed the whole vibe around it, and it is so much more positive. Cos she is there saying we have got to be doing this. I have seen the change and I think that we are getting there. Practically it is very hard to do it	<i>Parental pressure</i> <i>Positive attitude of teacher</i>
CY	Do you think it is escalating?	
P3	I think (school) could feel a bit like that. I think also that in this community there are a lot of private schools and they don't want to be seen as the remedial school none of them want to be seen as the remedial school. So, I think that that is quite real. So here there is talk of them building a vocational school. There is talk of them building a remedial school at the moment we have 4 support classes and then from Grade 5 there is nothing. But there is at least talk there. The need is going to get bigger.	<i>Early support programme</i>
CY	You have put in a lot of work.	
P3	Oh, that's good.	
CY	Thank you so much for your time and for agreeing to do the interview with me. Is there anything that I haven't asked that you would like me to know?	
P3	No, my only think now is the Edinburgh and what we are going to do instead. It what to replace it with. I relooked at the GORT and just thought maybe ...	<i>Test battery</i>
CY	Well I will look at it as well. Thank you, thank you so much.	
P3	Pleasure.	

APPENDIX 14: Transcription of interview with educational psychologist (P4)

	Transcription	Memoing
CY	Thank you for doing this for me. I really do appreciate it. I am just going to move this recorder so that it catches both of us. Ok. So how did you first become aware of and involved in accommodations?	
P4	So, I assist (name Academic Enrichment teacher) but I don't manage them. So, I have been doing this at (school) for 2 to 3 years. So, I became aware of them primarily when I was training they were taught to us, but not in detail.	<i>On-site knowledge of accommodations</i>
CY	Ok.	
P4	So, in my training was more just trying to get us through learning assessments in general as opposed to accommodations. And when I was an intern, afterwards, we asked if there was someone who could come in and help us train in accommodations because I think that it was a bit underdeveloped in the training. And also, I never did any accommodations assessments when I was an intern.	<i>Uni training minimal on accommodations</i>
CY	Ok sure.	
P4	But then again it was only the IEB ones, we didn't get any training on the GDE ... so that again is a huge gap.	<i>Univ training gap reaccommodations</i>
CY	So they are similar but not the same.	
P4	No, not at all.	
CY	And then the usefulness of the IEB Accommodation Policy. Do you have to refer to it at all?	
P4	Yes, I do. So, I think that this is a crucial thing about ed psych's as a category is that every role as an ed psych is different. So here the ed psych role is really the therapist. So, I started in the college and now I moved to the younger grades. So we are actually not included in any academic, so before (current Academic Enrichment teacher) we had a teacher that was remedially trained and everything so she managed all accommodations and it didn't used to come through the ed psych's. So now even the screening the remedial teachers do that.	<i>Role of psych</i>
CY	So now (Academic Enrichment) would do the screening?	
P4	Ja, so what I have been asking is what role they would like us to take on. So are we doing the therapy or the screening etc etc, so that is important, but the therapy role is just as important to me. So, I have been saying we should be doing more screenings and pockets of assessments instead of necessarily sending out for full psycho-eds. I think that there is a space for assessments to be done within the school.	<i>Role of psych therapy</i> <i>Accommodation assessment</i>
CY	Well that would also maybe take away the price factor for the assessments.	
P4	There is a debate, even within the school. My policy is that if we are doing the assessments, we are not private. So, if the school pays our salary so if I am doing it through my school hours then I must not charge them.	<i>Finances of accommodation assessment</i>
CY	Ok. Wow that is interesting.	
P4	Well that's my opinion. And its ok with me if I am in the minority. But now we don't do any full psych-ed assessments for accommodations because we don't want any bias. So, our accommodation assessments are sent externally. So, the school has taken the stance that we don't want anyone to feel that we are giving different scores, or we are asking the questions differently to get our boys to have accommodations.	<i>Accommodation assessments</i>

	Transcription	Memoing
CY	Yes, I see your point.	
P4	So that is why any accommodations assessments are done externally.	<i>Accommodation assessment</i>
CY	Ja, it's an interesting one.	
P4	Yes, and I think that it is part of internal politics so that's the thing with us there is a divide between stay in your lane and what is your role. So that is a bit unfortunate.	<i>Internal politics</i>
CY	How many ed psych do you have in the school?	
P4	We have 3. There's 3 of us in the whole school, ja.	
CY	And then the international accommodation policies do you come across them or know about them.	<i>International accommodation Policies</i>
P4	No.	
CY	No. Ok and then can you tell me about the usefulness of barriers to learning and now day they are moving into the cognitive neuroscience for dealing with barriers to learning and support in the accommodation process.	
P4	Um, I think that it is imperative that we know about it, but I don't know how much people link barriers to learning as a concept to accommodations. So, I don't think it is used here under the term barriers to learning. I don't even think they use the term barriers to learning. Um, so they use learning difficulties or disorder and if there is a diagnosis like dyslexia then they would go with that.	<i>Barriers to learning</i> <i>Diagnosis of barriers to learning</i>
CY	Ok and then the cognitive neuroscience aspect?	
P4	Cognitive neuroscience was part of our training, but not a very large part. But I have been on some fantastic training aimed specifically at this.	<i>Cognitive neuroscience</i>
CY	And can you use it here?	
P4	Yes, I do use my knowledge of cognitive neuroscience, but I use it in the prep school, relating to their difficulties.	<i>Cognitive neuroscience</i>
CY	Ah that's interesting, in the prep school. And the accommodations that are in the High School at the moment, can you tell me what you are dealing with?	
P4	Yes, so we have got a lot. Pretty much all of them. Separate venue is probably one of our biggest and then extra time and computers. Then we might have like very few who might have the need for amanuensis where you have your reader and your scribe. But it is growing so this year is our first year where we have had the most Grade 8's coming from remedial into our school. Then we do have the odd one with like diabetes, so they have rest breaks and food intake and I think we have one who has been granted a prompter.	<i>Types of accommodations</i>
CY	So that is kind of across the board.	
P4	Yes, we pretty much have everything. And those are accommodated as we can.	
CY	Ja. And then any specific support that is given to learners before the accommodations are granted.	
P4	So, it is very dependent on the boys. The boys that come from remedial school, have tried out accommodations and so they are implemented immediately. So, in the prep school we start support, we have remedial teachers for each grade at the early grades and then two remedial teachers cover Grade 4 upwards. Then we have an early reading programme and the children can be taken out in small groups and it is not always the same children. So, it is really fluid, and it seems to be working very well.	<i>Support programmes</i> <i>Early intervention for barriers to learning</i>
CY	And then in the high school what support programmes are in place	

	Transcription	Memoing
	there?	
P4	So, the problem is that sometimes in the prep they are awarded accommodations like a reader and a scribe. And then in high school we are like saying ok, so where is the evidence to support these accommodations. And that is something that we are currently looking at because this year has probably been the most pronounced.	<i>Lack of consistency and collaboration between Prep and High</i>
CY	Ok.	
P4	So, our policy here is that we never grant anything which we are not sure that we would get from IEB. Even Afrikaans exemption, even if a boy is dyslexic, we will not take him out of Afrikaans until it is granted because we have no guarantee until it is granted. So that is our difficulty from the senior prep.	<i>Discord between Prep and High School</i>
CY	Ok, so it is all a learning process.	
P4	And then before accommodations all boys have access to extra lessons, so every single subject has consolidations lessons every morning or after school. So, they can go to any of the teachers, but generally they have to go with a specific question. They can't go and say, "I don't understand Maths". They have to say I am struggling with say exponents. Then the teacher will work with them on that. That is there first level of intervention.	<i>Support programmes</i>
CY	Right.	
P4	Then the next level is that they would be moved into the Academic Enrichment space in the college. So, we have boys coming in quite late with concerns and there has been no history, nothing, and now they need accommodations. So, they come into the Academic Enrichment (AE) space and depending on what the concerns are they are assisted accordingly. So they will work one-on-one with one of the four or five people in the Academic Enrichment space and each of them have their own set of boys that they have to deal with and some of them already have accommodations and some of them don't.	<i>Levels of support</i>
CY	Ok.	
P4	So, it is a good support team. We are very, very lucky here. The only thing that we don't do here is individual in class assistance.	
CY	And the AE when they take the boys, do they take them during the day or after lessons?	
P4	It depends. They can come before school, they can come during break they can come in between lessons, they can come after school.	<i>Flexibility of timing of support programme</i>
CY	Ok it is boy specific.	
P4	Yes, very boy specific. The one thing that I have brought to attention is sign language as a second language. So, if they can't do Afrikaans maybe this is an option, but again this is my thought.	<i>Sign Language</i>
CY	Well that is something new, that is interesting.	
P4	Ja, so they would be using a different skill set. So maybe they could still have a second language.	
CY	Ok and then the challenges of accommodations, some of them you have touched on a bit.	
P4	Um the challenges of accommodations. So, the one thing is that we can only accommodate Grade 10 and 11 learners for all class tests and all exams. So, our Grade 8 to 10, we can accommodate them for their group test, which is like a cycle test and exams, but we cannot accommodate them for every class test that they write.	<i>Gr 8-10 not accommodated for class tests</i>
CY	Ja.	
P4	And so, their parents also have to understand that when they move	<i>Communicate</i>

	Transcription	Memoing
	them here that those are the limits of what we can allow. And even group tests and that the separate venue is getting so big that it is almost not a separate venue anymore. So, we have got to be very careful.	<i>collaborate with parents</i>
CY	That's good.	
P4	So, what they have actually done is they have split the time that the different boys write their cycle tests. So, Grade 11 would write their test first period and then the Grade 8's and 9's would write second period.	<i>Timetable carefully</i>
CY	So that frees up venues, that is quite something.	
P4	Most of our teachers are very understanding and it has been a process, but I think now that they understand what it means they buy into it.	<i>Teachers supportive</i>
CY	As you say it has been going for quite a while here, so ...	
P4	And our teachers are also very honest if they don't feel a boy needs an accommodation then they will say so and we are like well write that (on the accommodation application form).	
CY	Ja.	
P4	I think that our biggest barrier is actually the boys themselves.	
CY	Ok, in terms of what?	
P4	In terms of some of them do not even use their accommodations. So, I think that it is part of maturity and I think another part of it is the acceptance that they do have a difficulty.	<i>Challenge boy's maturity</i>
CY	So is that acceptance that they have a difficulty or acceptance from the other boys.	
P4	So, we are very lucky in our AE department we had the Basketball coach, the Water polo coach and the Cricket coach, so that gets us a lot of buy in and they are phenomenal! So, I think we have actually had boys come in that have kind of been shocked that First Team players are here for study skills. So, this has given it a bit of credibility that I don't necessarily think was there before.	<i>Support from school coaches</i>
CY	Amazing.	
P4	So, I think there are some boys who have all the accommodations, but they just don't use them because they don't think they need them. So, we had for example a Grade 8 who came from remedial and has all the accommodations but refuses to use them because he doesn't want to write with the stupid boys.	<i>Challenge of accommodation Learner wants to 'fit in'</i>
CY	Oh shame.	
P4	So we have got that and then we have got our other boys who are like ok cool where am I going to write and they are like messaging their AE people to say, and to me this is so cute, he got 86% on a test. So, they just appreciate all the help.	<i>Acceptance of accommodations</i>
CY	Ok so that is the challenges and then the advantages of accommodations? You have touched on a couple, but is there anything more on this?	
P4	So, the one thing definitely is the academic results. We do see an improvement in their academic results a lot of the time this is from like typing, extra time and separate venue. I have noticed with separate venue, besides from a decrease in anxiety is general confidence and self-acceptance. They feel very safe and secure here. That is probably the benefit.	<i>Advantage academic results improve Advantage personal development</i>
CY	That is incredible.	
P4	So apart from the marks, I feel that the boys feel very supported and very held.	<i>Advantage personal development</i>
CY	Well that is amazing if you have got that all working. Ok so we have	

	Transcription	Memoing
	done those two and onto the next one. Any changes in the role of the ed psych that you would like to see. You touched on one where you told me about getting more involved in testing and screening. Anything else?	
P4	So, this is a difficult one because our current Head psych is leaving.	
CY	Oh, ok.	
P4	So, we are getting a new person, but we don't know who it is. So, I think that they may influence our roles and they are going to have to decide what they want. So, if the school still says that we want you to be therapists then that is fine. And note that we can't do everything. Well that is my opinion. Because every role is different. So, our current Head psych is a manager and he doesn't technically see any boys for therapy. But it doesn't always work, he is supposed to be more case managing and parent support and parent intervention. So, we are not having to refer out for that. Because the school is very much of the philosophy that the school is a community and we support the entire community, so when we support the boy, we support the family.	<i>Role of ed psych</i> <i>Internal politics</i> <i>Systemic support</i>
CY	Ok.	
P4	So again, for any change, parent work is critical. So, we might have differences and I think that it will be dependent on what the new person comes in and says.	
CY	Interesting.	
P4	But it has taken me a long time from my training, cos my training was like this little box. We were trained as therapists we were not trained as ed psychs.	<i>Limitation of training</i>
CY	Ok.	
P4	But now having worked in the schools I am doing my PGCE. So, I can get some teaching knowledge.	<i>Further qualification</i>
CY	Fantastic. And then envisaged improvements in the accommodation process?	
P4	Um, I don't know. I think from my side there is nothing specific. Maybe there is something practical from (AE teachers) side.	
CY	And then parents, views and outside community view.	
P4	Maybe, like very few, some parents don't want their kids to be like using the accommodations because they don't think that it is fair. So, they don't actually understand. But the majority of parents when they understand the process, most are completely on-board.	<i>Parental involvement varies according to understanding</i>
CY	Ok.	
P4	But I think the department (AE) is incredible at reading parents and managing them. And we need to be quite careful as to how we approach them with initial concerns because they can be defensive.	<i>Collaboration</i>
CY	Oh ok.	
P4	Which they have every right to.	
CY	Yes.	
P4	But I think in general the school has done a very good job at normalising things. So, we try work very collaboratively with everyone.	<i>Positive school approach</i>
CY	Ok thank you we have covered all the questions. Thank you for spending time with me. Is there anything else that you would like me to know about accommodations that I haven't asked?	
P4	No.	
CY	Thank you, I really do appreciate it.	

APPENDIX 15: Transcription of interview with educational psychologist (P5)

	Transcription	Memoing
CY	Thank you, you know I really do appreciate you doing this for me. It is so good to be here you really do have a beautiful school. Ok, so if you are ready, we can start. So, the first one is how did you become aware of the accommodations?	
P5	Of the kids at the school?	
CY	Well more generally how did you first come to know about accommodations?	
P5	Yes, well I am an educational psychologist and it what we do when we assess and well it's what we do here.	<i>On site knowledge of accommodations</i>
CY	Have your always worked here?	
P5	I used to work in a special needs school. So, there we had lots of accommodations, but it was (govt dep).	<i>Special needs accommodations</i>
CY	Ok.	
P5	So, when I moved here it became IEB which is a little bit different with quite a stringent assessment process. But since I have worked here, we don't assess in house. So, we don't assess our own students. We refer out.	<i>Collaboration with assessing psychologist</i>
CY	Ja.	
P5	If I were to assess I could not breathe, I don't know how I would find the time. I mean there are six children messaging me now.	
CY	Laugh, and there is one at the door.	
P5	Ja it's break time I am hoping that no one comes in. It's just too busy. We have a second psychologist who comes in two days a week and she just does accommodations – she deals with the referral process and putting the report together. I don't have time for that.	<i>Collaboration with school psychologist Admin assistance</i>
CY	Ok.	
P5	Ja so we don't assess in house.	
CY	And the IEB Policy how have you found that?	
P5	I don't have very much detailed knowledge on this. My opinion on it is that it is probably very fair. And I find we had issues where the week before an exam we have emailed them with a big issue and they have gone, let me think about it and they have put something in place for us. So, from that side of things I have always really appreciated things. You know that you can email someone, and they will get back to you. I had a student who had quite a bad brain injury and was anxious and her brain was scrambled and she was really struggling and it happened in June and she was writing finals and I was able to email the IEB and say this is the medical results this is what the scan showed.	<i>IEB Policy</i> <i>Good communication with IEB</i> <i>Case by case IEB review</i>
CY	So, it was good in a special case by case incident?	
P5	Yes, it's not like oh well they didn't apply six months ago. So, policy wise that way they have been great.	<i>Positive IEB Policy and contact</i>
CY	And have you touched on any international policies, do they ever come your way.	
P5	We had one assessment that came out of New York that I read, but I don't even think that the child ended up coming. Often our students have come from overseas are not requiring support.	<i>International Accommodation Policy</i>
CY	Ok that's interesting. And then in terms of support that gets put in do you find that you draw on knowledge of barriers to learning or the cognitive neuroscience behind learning? Does that ever come up in	

	Transcription	Memoing
	terms of helping pupils?	
P5	It's imperative, absolutely. So, I came across it in my training, there is a book called 'Addressing Barriers to Learning', I have two copies of it.	<i>Barriers to learning</i>
CY	Ah I know it. It's co-written by (name).	
P5	And (name) my lecturer. So (name) was our course conveyor, so I have the version from my Honours and then my Masters. My training is in barriers to learning I just don't use it as much cos I don't assess.	<i>Uni training barriers to learning</i>
CY	The needs change. And, cognitive neuroscience?	
P5	Ja, well in my training we had a module on neuroscience. Something I am very interested in as I have a science degree in physiology?	<i>Cognitive neuroscience</i>
CY	And do you find it useful now?	
P5	I don't use it much right now. The students at (school's name) have more common issues with reading and concentration. Previously I worked in special needs schools and used it more then.	<i>Cognitive neuroscience</i>
CY	Ah ok. And then the accommodations that you are dealing with at the moment at your school.	
P5	Ja, so we have a lot of anxiety and extra time and around slow reading speed and then having a reader. We use i-pads now, up until this year, our teachers used to read into a programme and that used to play, and it would be her voice. Now with the younger kids we have electronic voice recording and then the i-pad reads but for the Afrikaans exams we read. We don't read Maths exams. So, we have a lot of i-pad readers and they get used to it, you know your intonation is not there and your emphasis is not there, but they get used to it.	<i>Types of accommodations</i>
CY	Ok, right.	
P5	So obviously we have spelling accommodations and when our girls have EVR's then have a separate venue and they write in this classroom next door and we put all the grade together but when they are in Matric if they have their accommodation for a separate venue they will get a separate venue. Their very own room.	<i>Types of accommodations</i>
CY	Wow.	
P5	Then that requires their own invigilator which comes at a cost. And that is a cost to the parents. Last year we had a student who could write a three-hour paper in six hours. She had an MS disorder, and she could take a nap! (rest break) We also have a diabetic with food intake. So, she didn't have it throughout her schooling. But then in Matric writing in the hall is quite daunting and she is a very anxious person, and the anxiety would push her sugars up or down or whatever and she got her own room.	<i>Financial challenge</i> <i>Type of accommodations</i>
CY	Well I am glad that it worked for her.	
P5	And then extra time is just done in a regular venue.	
CY	And once the children have got their accommodations is there any particular support programme that it put in place for them.	
P5	Ja, well there is a lot of consolidation in the lower grade.	<i>Support in lower grades</i>
CY	Is that like an extra lesson?	
P5	Yes	
CY	And is it done during the timetable?	
P5	It can be in CLS – which is 21 st Century skills – there you go. So, its Coding and Programming and Xhosa and so the girls that are stronger can take an extra subject. So, in the junior grades there is a lot of support.	<i>Support programme</i>
CY	So that is where you put in the extra lessons?	

	Transcription	Memoing
P5	And so, they get asked would you go to an extra Maths or Afrikaans and that is then the consolidation.	
CY	And then study skills does that go into it or is it done in prep	
P5	We don't have study skills and I have been speaking to our other ed psych today, but we just don't have the capacity. There is just not enough of me to get around. We also have the Grade 8 and 9's who don't take Afrikaans either because it has been exempt by the IEB or they are immigrants and then there is more time, and it is often the weaker girls that have been exempt, so then we have more time to play with. So, in Grade 10, 11 ,12 they have after school support sessions.	<i>Study skills</i>
CY	So, they can actually have it all here.	
P5	They often get tutors but there are teachers – so it doesn't matter which teacher you have you go to this one English teacher and she will do consolidation. So, there is English, Afrikaans, Maths, Physics and then I know there is an Art – they call it Open Studio. So, there is a lot.	<i>Support from external tutors</i>
CY	Ja, that is a lot of support. And then the challenges that you experience with the accommodations and putting this whole IEB application together.	
P5	No, I wouldn't blame the IEB, my concern would be the parents. It's the follow through from the parents. You know, why is my child not being helped? We don't offer readers and that for tests, we do not have the capacity. You know we don't have special needs and coming from an environment where I have worked in a special needs school. Our girls are nurtured but we are also an IEB school, and for one particular grade they are very strong in Maths and we have one class for the 90's and one for the 80's and then one other class. You know for Maths we have to stream them. It's just in Maths. But then you know when you are not in that group, so you know you should be taking Maths Literacy, or you would prefer to take Maths Literacy.	<i>Parental pressure</i>
CY	Ja.	
P5	And then also as the psychologist we can't take kids out of class so unless they come to me. So that I have a lot of like ah you said you would see my child. And I go like cool I have emailed them like four times, so what do you want me to do. So that for me is more the challenge than the IEB I find the Policy with the IEB fair.	<i>Timetabling challenge</i> <i>IEB Policy</i>
CY	Good.	
P5	So, we don't send in dicey applications. (School psychologist) will do a pre assessment in house, she can do an Edinburgh or a WIAT and test their spellings and sometimes we will give extra time in a June exam and see if it makes a difference and then apply.	<i>Accommodation application</i>
CY	So, it's a measured thing.	
P5	Yes, so we are not sending off a thousand applications and also if they come in Matric or Grade 11 and there is no history, you know she is very careful about it. We have had a Matric application now from a psychiatrist saying you have got to give her extra time. Well, you know it is really hard without an academic background you know. And that is fair you know if you have not got it before Grade 10, you can't just go in Grade 11 oh I have anxiety and need extra time. So, we take a very measured approach, so we feel it's fair that the girls that have got accommodations do deserve them.	<i>Pressure from psychiatrist</i> <i>Fairness of accommodations</i>
CY	Good ok, and so those are the challenges and then the advantages. What are some of the advantages you have seen?	
P5	Of what the policy?	

	Transcription	Memoing
CY	No of the accommodations for the girls.	
P5	Well I think it just levels the playing field a little bit. Ok I think it is fair. I don't know if it is always used appropriately by the girls. I don't know if they realise that just having a separate room, they don't always use the reader but having it there available you know it just levels the playing field a little.	<i>Accommodations not always used</i>
CY	And from a personal aspect for the girls have you seen any positive or negative spin offs for the girls?	
P5	The girls are accepting – oh ja, I don't think anyone cares. You know the girls will come and write and no one cares and maybe the extra time the girls like go I also want extra time and then they will go to (name) and she will go like cool tell me why and she will go like no my darling. So we keep it very fair and we have students that get like 80% and they want extra time because they write too much and then (psychologist) and I have worked on time management like this is 300 marks how do you divide it, how do you plan it. So, I do that a lot with the girls, I talk about how we are writing too much, so we work on that.	<i>Acceptance of accommodations</i>
CY	And do you find that the parents will accept that?	
P5	Well if you are willing to pay like the R8000 that it is going to cost you, go ahead. We are not going to stop you.	<i>Financial challenge</i>
CY	So do find that some of them push through.	
P5	And then it is denied and then there is nothing we can do about it.	
CY	And in terms of the role of the educational psychologist has to play in the accommodation process. Can you tell me about that?	
P5	It's a fulltime job, we have a person that does the applications, she works twelve hours a week (two days a week). And sometimes are busier than others. And you know we have got it down to quite a fine art now, in the sense that we have a list and a spread sheet and when we need to reassess and the parents are updated regularly about when they need to reassess. So, if you were assessed in Grade 7 we wait and assess again in Grade 10. If they have been assessed in Grade 5 then have to be reassessed in Grade 9. So, we have to assess once in high school.	<i>Collaboration from school psychologists</i> <i>Collaborate with parents</i>
CY	If it is formally granted in Grade 8, then it holds for the whole time.	
P5	Ja, I am not sure. But also, I think that the rules have changed, you know what I mean. I know that the rules have changed.	<i>IEB Policy update</i>
CY	Yes, they were revised and what was changed it that now the academics can hold for a whole year.	
P5	The academic assessment, the scholastic assessment?	
CY	Yes, So, that holds for a whole year, so some of the children are starting to be assessed in Grade 7. In particular like the remedial schools they give them an exit assessment and then you don't want them to have to redo in Grade 8.	
P5	Oh yes yes.	
P5	Is this (name)?(knock at door).	
CY	And then to finish off any changes to your role that you would like to see happen.	
P5	No, I don't have a problem.	
CY	It's working for you.	
P5	We have a good system in place.	
CY	And views from the broader community, like from your other teachers, your other parents, doctors?	
P5	I think for me you get a lot of doctors and psychologists and they will	<i>Pressure from</i>

	Transcription	Memoing
	say, the school must give you extra time. The school must give you're a reader or a prompter and we have had issues this term already when I had to say it is a recommendation, it is not stipulated. And the psychologists tend to say oh well the school will do that. And the psychiatrist says well I will just write a letter. Well ok, but you are not the b-all-and-end-all when it comes to an IEB application. So, I think that from the broader community the parents are like I've paid for it. So, from a broader community those are the kind of issues that we deal with.	<i>psychiatrist</i> <i>Parental pressure</i> <i>Financial challenge</i>
CY	Do you see their involvement as having picked up?	
P5	Marks are a big thing, we are a new IEB school, this is only our 4 th year this last year so we are very new to the system and then with (varsity) around the corner, and the requirements for university are very high.	<i>Marks priority</i>
CY	It's hard to get into the (name of university).	
P5	It's really, really hard.	
CY	Thanks so much I really appreciate your time and I can see that you are really busy. I am going to stop recording now.	

APPENDIX 16: Transcription of interview with educational psychologist (P6)

	Transcription	Memoing
CY	Thank you so much for doing this interview with me. I really appreciate the time that you have set aside for me. As you know, I am going to record the interview. When I transcribe it, you will be given a pseudonym 'P' – and then a number 5, 6 or 7, something like that. Ok. So, then the first one how did you become aware of the accommodations? What got you involved in this process?	
P6	So, when I arrived there was a psychologist here before me and she had a list of kids that had accommodations.	
CY	So, with the job came accommodations.	
P6	It was part of the job description.	
CY	And how long ago was that then?	
P6	That was 2013. August 2013.	
CY	And then the usefulness of the IEB Policy Document that gets sent to you. Can you tell me a little bit more about that and how you experience it?	
P6	No, I think that it is quite user friendly. So, what I do is I take that document then I train readers and scribes according to that document so ja I think that it is quite self-explanatory. The one part that I do see as a little bit of a grey area is where they mention that the assessment holds for 2 years so the assessment can be done in the Grade 7 year but we just need to submit in the Grade 8 year. So that is the only bit of a blurred area.	<i>IEB policy easy reference</i>
CY	Tell me a bit more about the grey area?	
P6	Ja – well now it holds for a year from Grade 7 which is great.	
CY	And in terms of getting the policy to you. Do you get it sent to you or how do you get it?	<i>Ease of IEB policy delivery</i>
P6	So, it goes via our academic head, so the circulars get sent to our academic head and to his PA and then they just forward the relevant ones.	<i>Good collaboration</i>
CY	So that works for you, you don't find you need to access it personally or anything.	
P6	No, no.	
CY	Good and then do you use any other policies to inform your work? Are there any kids that come from international schools that you have to access any other policies?	
P6	We have got some kids doing Cambridge level but that is quite easy. So, there they don't need a whole application they just need a psychologist's report and then they grant it quite easily.	<i>International accommodation knowledge</i>
CY	Ja. Ok, and then the barriers to learning and the cognitive neuroscience behind learning.? How does this knowledge inform your support?	
P6	So, what happens is that when those barriers occur the teachers are alerted as to this child is presenting with let's say with dyslexia so that there is an awareness and please don't ask him to read aloud in class. So that there is no anxiety driven there. And then what we do is we look at individualised learning programmes.	<i>Barrier to learning IEP support</i>
CY	So, you have IEP's for the kids?	
P6	So, what we do is they have Option 1 and Option 2 and a cell period in their timetable that we then play around with and we get tutors to come in then.	
CY	When you say you have Option 1 and Option 2 is that your 2 nd and 3 rd	

	Transcription	Memoing
	languages?	
P6	No, Option 1 Option 2 is like Creative Art, or Music or Dance or EMS or Design and Technology. So, we put an individualised tutor in place, specifically in the timetable.	<i>Support structure timetabling Tutor support</i>
CY	Ok, the tutors. How do you source all these people?	
P6	We have got a data base here, so I've got really only three independent tutors that I work closely with and that I recommend to the boys. They are all independent, so I put them in touch with the parents. They discuss cost and they then run with the programme with the boys. So, then I step back, and the tutor comes in. It can be a bit tricky sometimes because the boys' timetables often change. You know a water polo tour and a rowing tour. You know or they are sick in san. So, then they have quite a good relationship with the tutors and they get billed privately.	<i>Local community support Admin challenge Collaboration Readers/scribes</i>
CY	Do the tutors also scribe.	
P6	I never use the tutor to scribe for ethical reasons, so the tutor is never the scribe.	
CY	And then where do you get your readers and scribes?	
P6	Most of my readers and scribes are generally old ladies. Most of them have been in the teaching profession and now they are retired.	<i>Local community support</i>
CY	That's why they are so reliable?	
P6	So, what happens is I've got a WhatsApp group with probably around twelve readers and scribes whom I have done training with. So they have all been trained they have signed contracts and then if a child approaches me and says I need a reader for tomorrow Geography Period 3, then I put it on the group and the first reader and scribe to answer comes and then they meet the boy in the foyer of the library. I email the teacher and say can I please get two copies of the test for 'Johnny' and then they put it in the box outside my office and I just go to where they are writing.	<i>Role of psych Heavy workload Innovative and positive</i>
CY	You make it sound so easy but it's a lot of organisation. You make it sound easier than it can possibly be. It's amazing.	
P6	Shame, thank you. The exam periods are tough because some kids want a reader and scribe for specific subjects and not for all. So again, each child gets a WhatsApp and I say ok what exams do you want a reader and a scribe for. Let me know. Then it goes onto a specific schedule for that boy and then that boy has a reader and a scribe for that.	<i>Challenges scheduling scribe/reader</i>
CY	That is amazing. And then how many boys do you have with accommodations?	
P6	Lots so, at the moment we are probably sitting with thirty of our boys that have accommodations. It's quite high. And we have probably got around fifteen boys with readers and scribes.	
CY	Ok wow. And then the next question. What kind of accommodations are being used at the school?	
P6	Ok, so we have got extra time, spelling, separate venue, use of computer, amanuensis and last year we had someone with exemption from oral moderation, rest breaks, and somebody with food intake because of diabetes.	<i>Types of accommodation</i>
CY	Ok, so you have them from almost across the board. And then typically the children that are coming in from prep school, do they just come into high school and get the accommodations informally or do you make	

	Transcription	Memoing
	them try without them? How does it go for you?	
P6	So, we try and get them to do it without. So, when they do come in, especially from our prep school they have been told that it does not just automatically follow through. If they have been granted at our prep school, then they will be granted on the basis that the child has had the full psychological assessment and it has been one of the recommendations.	<i>Waiting period</i> <i>Collaboration with prep school</i>
CY	Ok.	
P6	We do not put in place readers, scribes, separate venues anything other than time internally until it has been granted fully by the IEB.	<i>Waiting period</i>
CY	Ok.	
P6	Just because psychologically, it is more detrimental when they get used to something and then it is taken away.	
CY	So at least the time does give them some form of support. And then after they are granted their accommodations, after they have formally got that letter, are there any specific programmes or any specific support routines that the boys have to 'kind of go into.	
P6	It is basically according to the recommendations that the psychologist has made. So, once that report has come to me, I then email parents and I ask them consent to forward the report to his teachers. Or they complete a form, and they tick a block so they either give permission for the whole report to go or they only give permission for the conclusions and recommendations or they do not give consent. Then they forward that to the parents because you get some parents that are angry because the teachers don't know what is going on and others that don't want the teachers to know anything. So, I am sitting with both of those spectrums, and it is just to cover myself, in terms of ethical clearance of distributing the report.	<i>Collaboration with teachers</i> <i>Parental involvement</i>
CY	So sometimes the teacher 'not knowing' is actually the parents doing.	
P6	Yes, which is fine. I respect that but then at least I am absolved. So then after they have been granted, so what happens is with those recommendations, the recommendation could often be the implementation of a tutor. It is sometimes about time management, organisation and planning. So, we have got Elevate which is a company which has very young, dynamic, presenters. We do Elevate workshops every year for the Grade 8 to 11's and it includes exam study skills. It's a workshop and they get a book, and it is very good, I mean the content is brilliant.	<i>Study skills external support</i>
CY	Gosh well done, where did you find that?	
P6	They approached us and we have been running with them for about six years. And they are brilliant. So, they come in, they are young dynamic. They give short bursts of information.	
CY	So, they actually present here. It's not just a screen presentation.	
P6	No, the boys actually attend a workshop here.	
CY	Ok.	
P6	And then the Grade 8's also have an intensive workshop in their tutor groups so each house has got about fifteen boys and they have a tutor, academic consultant, that comes in and she does an intensive workshop with those fifteen over assembly period and chapel period and she does time management and organisational skills. So that also just covers that.	<i>Study skills school support</i>
CY	Those are amazing support programmes to have.	
P6	And then obviously if the recommendations are around medication then I refer straight to the doctor, we don't have psychiatrists here, so	<i>Local community involvement</i>

	Transcription	Memoing
	then they can have access to a GP.	
CY	And then the challenges? The prevailing challenges that you experience because you seem to be running this on your own, or do you have a support team.	
P6	No, I don't, it's me.	<i>Heavy workload but positive</i>
CY	You don't have a teacher that is aligned to you?	
P6	It can be extremely stressful because you are dealing with emotions. I do the therapy as well. But for me you know, you can't divorce the academic and the emotional side. They are very much intertwined and the one affects the other. But the running of the readers and the scribes is challenging. Especially when you are sitting in a therapy session and you go over a little bit and your realise gosh you have to get the test upstairs and you also have teachers that forget to give you the test and you also know that you are dealing with kids that are quite anxiety prone so you are very aware of that. So, the readers and scribes always arrive 10 minutes earlier. The readers and scribes are paid by the parents. So, at the end of every term they submit a form where they have got all the boys that they have read and scribed for and the school pays them and then we recoup that amount from the parents.	<i>Multiple roles of psych</i> <i>Acc challenges</i> <i>Admin challenges</i> <i>Financial challenges</i>
CY	Ah ok so you work it that way.	
P6	So, then a big challenge is actually getting the timetables for all the boys and exam time getting every child on their individualised programme for their test is the big challenge. Once that is done then putting readers and scribes in place is relatively easy. But the challenge comes when the readers and scribes have "life happens" and suddenly they need to go to hospital, or something happens, and they can't make it. So, then it's finding another person. And then another huge challenge is venues. Finding separate venues where the reader and scribes can meet.	<i>Admin challenge</i> <i>Separate venue challenge</i>
CY	Ja, ja. How do you get around that?	
P6	So, what we do in exam time is we block off the top part of our library. And kids aren't allowed to access there and we have three seminar rooms there so usually I put my Matrics in there and then we use the open space for some kids and then you just look for little holes everywhere where you can put a reader and a scribe and a child, where it is going to be quiet. And the challenge comes when those kids are writing exams and let's say another grade isn't and kids are changing classes and there is a noise level.	<i>Separate venue challenge</i>
CY	So, it is difficult to accommodate everybody. And in terms of the computers do you have challenges with computers?	
P6	We've got a generator, so load shedding is not really a problem. So, what we do is we have little laptops that have got spelling disabled and that is completely clean. So, then these can move which makes it quite easy. I have got two Grade 11's with computer accommodations and they are quite happy to type in the venue. So, then I don't have to organise a separate venue for them. So that is another challenge you have to be aware of when that exam finishes and then quickly run and fetch the flash stick and print it and hand it in.	<i>Positive attitude</i> <i>Accommodation challenge</i> <i>examtime</i>
CY	Ja ja.	
P6	So that is the way it is done. Exam times are stressful.	<i>Accommodation challenge</i> <i>examtime</i>

	Transcription	Memoing
CY	I can imagine! And then the prevailing advantages?	
P6	Ah you know for me it is just looking at their self-esteem and how that accommodation lifts them. It just gives them that extra support and the extra edge. And you know that is incredibly rewarding. We had a boy last year, Matric, severely, severely dyslexic and he arrived here in Grade 8 we put a tutor in place for the five years that he was here, and he left and he got a BD pass.	<i>Emotional advantage</i> <i>Improved academic advantage</i>
CY	Wow.	
P6	And he did exceptionally well. But just to see that and how their EQ develops as well. Just when they embrace that difficulty it is amazing.	<i>Emotional advantage</i>
CY	Ja well that is fabulous to hear. Any other advantage that you have noticed?	
P6	I think because we implement it for tests as well we don't only implement it for exams so we run it for all their tests so I think because of that by the time they get to the exams they are quite used to it so it becomes normal for them. So, they just embrace it and they able to run with it.	<i>Accommodation Implemented across board</i>
CY	Um and then the changes, so you have your role, at the moment, are there any changes that you would like to see in the educational psychologist's role?	
P6	For me, I don't think it need to be an educational psychologist's role to do the readers and the scribes and manage that.	<i>Relief of some admin duties</i>
CY	Ok.	
P6	Because you don't need a degree to do that you just need someone who is organised and who is compassionate. Because you can have kids sending WhatsApp to you at 10 or 11 at night saying oh, I forgot, can I please have a reader and a scribe for the morning. And you just need to manage that because you know that it is not a deliberate thing, they battle with time management and all those executive functioning skills.	<i>Challenges of accommodations</i> <i>Time organisation</i>
CY	So, you would like to split some of the jobs?	
P6	That for me can be done by somebody else especially because you are dealing with emotional kids as well. And then obviously the admin is extensive you know getting the relevant forms for the applications.	<i>Challenge accommodations</i> <i>IEB application</i>
CY	Do you compile the applications?	
P6	Those are all of them sitting there.	
CY	And your assessing psychologists don't they give you the files completed?	
P6	They do, they give me a report but the one here does not compile a file, but I know that there is one in Joburg who does. So, when I refer there it comes back completed.	
CY	So, you sometimes compile the file as well. Alright so that is that and then the last one. Looking at the broader community and then also the parents. What is the feedback on the accommodation process?	
P6	It varies so you have got some teachers who think that accommodations are a waste of time or that kids don't need it. Or sometimes the kids are not using their accommodations, so we have kids that have been allocated their extra time, but they don't necessarily use it for all of the exam. But most, I'd say 95% of teachers are really onboard and very supportive. They don't mind filling in the form and you know helping the child. The wider community is very supportive in terms of my readers and scribes. When I have training, I tell them that its ethical standards apply they are not allowed to discuss it. We are a very small town, and they are not allowed to discuss it	<i>Teachers supportive</i> <i>Wider community supportive</i>

	Transcription	Memoing
	outside at a braai or a social. The boy's identity is always protected because you are dealing with vulnerable adults. So, they, the wider community, are very supportive.	
CY	And the parents?	
P6	So interesting Grade 8 parents and most Grade 9 parents don't really support accommodations in a big way.	
CY	Do you know why?	
P6	Maybe because they don't know, or they just want their child to fit in and be ok and have a clean start. So, they don't tell you everything. Whereas in Grade 10 and 11, and I have definitely found a spike over the last few years, parents want accommodations for their child because they feel that it is a sign of good parenting.	<i>Negative view of accom from some parents</i>
CY	Interesting.	
P6	So 'Johnny's' got extra time so I think my child should also have it because then he is going to be doing well. So that anxiety around entrance into varsity and matric results has definitely risen in the past two years in terms of parents wanting their kids to get accommodations.	<i>Parental pressure for accommodations</i>
CY	So, are the parents pushing to click up marks?	
P6	Ja, so they see it almost as a support that they could do. So I understand it because they are far away and they are trying to do whatever they can for their kids but I do see that there has been that shift that Grade 11 and 12 parents are like listen I want it.	<i>Parental pressure</i>
CY	Ok, and then that is us done, I think I have covered all my questions. Is there anything that I haven't asked that you would like me to know?	
P6	Well, I think that that is everything. I think that the one thing that I was really happy about was last year when the IEB said that that you didn't need another person with the reader and the scribe. Because implementing that the year before, was not good for the child. Because suddenly in a small venue you had the reader that the scribe plus another person invigilating and I think that it just caused quite a lot of anxiety.	<i>Positive IEB Policy change</i>
CY	Ok ok, good so the update is an improvement?	
P6	I think it was best practice for the child.	<i>Positive IEB Policy</i>
CY	Well that is good. Well ok that is me. And thank you for all the hard work that you have done behind the scenes to make this possible for me! I really do appreciate it, especially now.	
P6	No, it is no problem.	
CY	Thank you. Ok, I will turn it off now.	

APPENDIX 17: Transcription of interview with learner (L1)

	Transcription	Memoing
CY	Thank you for agreeing to do this interview with me, I really do appreciate it. And I have your age and grade now, so that is ok. Then the first question I have got is, I am interested to know where you heard about accommodations and what accommodations you have already been granted?	
L1	So, I know about them from school, I get an extra 10 minutes per hour.	<i>Types of accommodations</i>
CY	Ok, and anything else?	
L1	And then Exemption from First Additional Language.	<i>Types of accommodations</i>
CY	Ok, that is a big one!	
L1	Yes, all the other people were like "what".	
CY	I know it's a hard one to get.	
L1	It is a hard one! and then also Spelling.	<i>Types of accommodations</i>
CY	Oh okay, and a reader?	
L1	And a reader, an electronic reader. And a separate venue.	<i>Types of accommodations</i>
CY	Okay. So, for your reader, do you use an electronic reader or maybe the pen?	
L1	Ah no, I use it on the computer.	<i>Types of accommodations</i>
CY	On the computer. Do they manage to put all your exams on the computer?	
L1	Ja	
CY	Oh wow, that's very organised.	
L1	Um ja, I can choose for which ones. I just don't come for Maths cos there's like no point.	
CY	Ok, and then can you tell me about the role of the educational psychologist in your support, at your school?	
L1	It's like so I would send her all my tests and things and she will organise it. And make sure that there's a reader for me for my tests.	<i>Role of psychologist</i>
CY	Ok.	
L1	I'll know like on a Tuesday I'll have a Geography test and then I come here. And then also for all the exams.	
CY	Ok.	
L1	And then for the cycle test and the computer will be set up-cos we have a cycle test every week.	<i>Role of psychologist</i>
CY	Ok so she's busy with that then. So, all of the tests and exams and separate venues, that's all here. Are there any other programmes or support lessons that she organises?	
L1	Ja, well, so like if we have like a problem with something then we can come and talk to her.	<i>Role of psychologist</i>
CY	Ok so like a problem socially with other girls or like a problem within class with learning and work?	
L1	Ja.	
CY	Both?	
L1	Ja both. Cos if, like we are struggling in work then we can come talk with her then and she'll sometimes email the teacher or something. Like one teacher took marks away because of my spelling and then it was allowed so I came and talked to (name), and she sent him an	<i>Role of psychologist</i>

	Transcription	Memoing
	email.	
CY	Ok, I see. So, tell me, do you do any extra lessons for support?	
L1	I sometimes go to Maths, it depends if I am struggling with the section or not. And then last year I went to English.	
CY	Oh, ok and do you to the English still?	
L1	No, I don't need to now	
CY	Ok, well that's fantastic. Onto the next question. Looking back to before you were granted accommodations and exemptions what support was put in place for you?	
L1	So. um in Grade 5 I got the reader and I got spelling and the extra time. But then I got separate venue and exemption from First Additional Language last year.	<i>Previous support</i>
CY	And that as in Grade 8.	
L1	Ja in Grade 8.	
CY	Ok, so that's when it came through. So, before you had your accommodations or in prep school or early Grade 8, what support did you have? What did they put in place for you?	
L1	Ja, so it was like the same as this year except I had to do Afrikaans.	<i>Previous support</i>
CY	Ok, so what you were given in prep school you could just use in high school?	
L1	Ja.	
CY	Ok, that's really good.	
L1	But I think (psychologists name) had to reapply for them to the IEB.	
CY	Ja you do have to formally apply. They can give them to you in prep school but then they must apply in high school. Ok so there wasn't a gap for you where you were left with nothing?	
L1	Ja, no there was never. That was only like in Grade 1, 2, 3 and 4. In Grade 4 they started to notice that I was struggling.	<i>Barriers to learning</i>
CY	Ok and then did they put support in for you.	
L1	Ja, um, I think if I just didn't know how to spell stuff then I'd just ask the teacher.	<i>Barriers to learning</i>
CY	Ok, so more the teacher support, you didn't have to go off to someone else.	
L1	Ja, and we had an Au-pair and she helped me with stuff.	
CY	Ok so now that your accommodations have been granted, we know that you come here and get all your things read to you here. (Psychologist) is here to help you and to liase with teachers. Is there any other support that you have?	
L1	No, not really.	
CY	So, you don't go to the other school psychologists at all, (Psychologist) does everything?	
L1	Ja, You, have to book an appointment with her or sometimes you can just walk past and see if she's got somebody. She leaves the door open if she hasn't got anyone.	<i>Role of psychologist</i>
CY	Oh, ok so that just tells you. Good. Ok we are over here already (points). What challenges have you experienced with the accommodations?	
L1	So last year exams one of the readers (computer) wasn't working so then I started to stress but then they managed to get a teacher and then we went to another venue and the teacher just read the test for me.	<i>Challenges of accommodations</i>
CY	Okay, so the computer reader wasn't working.	
L1	Ja sometimes the reader doesn't work but then they have a teacher there in case.	<i>Challenges of accommodations</i>

	Transcription	Memoing
CY	Ok, that is stressful, so that is when the computer lets you down, when it's not working.	
L1	And also like with the load shedding and stuff, but sometimes the generators are working.	<i>Challenges of accommodations</i>
CY	Ah I hadn't thought of that.	
L1	Ja but we only had that trouble like once.	
CY	Ja we're having a lot of that lately, but they usually have it on back-up generator. Is the whole school on the generator or is it mainly for the offices?	
L1	I think it just the offices and then the Wifi and computer labs.	
CY	Ok, it's a big school to be run by a generator. So that's the computers going down and load shedding as the challenges. Was there anything else?	
L1	No not really.	
CY	Not really, okay good. So, it's kind of been quite a smooth process for you?	
L1	Ja.	
CY	I'm pleased to hear that. And then the advantages, what advantages have you experienced with the accommodations?	
L1	I don't have to rush my test so like sometimes, like Grade 4 I used to have to like rush to finish in time. It's cos I write quite slowly. And I also don't have to worry about my spelling like cos I don't have to sit there and think how to try spell something.	<i>Advantages of accommodations</i>
CY	Ok, exactly you can just go for it.	
L1	Ja go for it, as long as they can kind of get the word then its fine.	<i>Advantages of accommodations</i>
CY	Exactly, so we've spoken about not having to rush and not worrying about your spelling, anything else?	
L1	Also, that I don't have to worry about another language.	
CY	Ja, tell me a bit more about that, what a relief that must be?	
L1	I think because learning like English and Afrikaans was really hard and then like trying to juggle the two and Afrikaans is quite a big subject.	<i>Barrier to learning languages</i>
CY	Ja it is, so it's big relief to have that accommodation. Ok and with regards to your marks, do you think your marks have improved with the accommodations?	
L1	Ja definitely. I think it's like 2% or 5 % that they improved.	<i>Advantage improved academic results</i>
CY	Well done, that's fantastic. That's such good news.	
L1	Thanks, ja I'm happy.	
CY	Ok and then from a different perspective if we take the marks aside and the not having to rush, are there any other things from a social side. What are the girls like with your accommodation?	
L1	They fine, they don't really say anything. Like sometimes they ask me why I don't do Afrikaans. But I just have to explain it to them. But other than that, there's not really anything.	<i>Peer acceptance of accommodations</i>
CY	Alright. Then any changes when you think of the process, and the process is rather long. First of all, you need to be identified as needing the accommodation, then you have to do that whole assessment. Where did you do your assessment?	
L1	I think they just took my marks because last year in Grade 7 I left my remedial school and I think they wrote on my report that I need a whole lot of stuff.	<i>Previous support Early interventions</i>

	Transcription	Memoing
CY	Ah ok, so they took that.	
L1	They took that in.	
CY	What school where you at?	
L1	At (name of full time Remedial School).	
CY	So, it was all ready from the Grade 7 year and then (Psychologist) could use that. You didn't have to go for any other test?	
L1	Ja no I didn't have to go. I think they just looked at some of my Afrikaans marks too. So, then they just gave me that. But I think it was also cos we had to wait a long time.	<i>Application process lengthy</i>
CY	A long time to grant it?	
L1	Ja to grant it.	<i>Challenge lengthy IEB review</i>
CY	It does sometimes take a long time. So, let's just think of that process cos we got a bit side-tracked there. Is there anything in that whole process that if you could look at it and say, if I was doing it again, I would change it here?	
L1	No, I don't really think there was anything.	<i>Positive attitude</i>
CY	Did it go quite smoothly for you then?	
L1	It went quite smoothly.	
Cy	I think a big plus was having come with it all done and ready. So, you didn't have to redo tests and everything.	
L1	Ja, exactly.	
CY	And then (Psychologist) could get it in in the First Term?	
L1	Ja she got it all in the First Term.	
CY	And then there you go so you had it all by the second term. Is there anything else that you would like to tell me about the accommodation process?	
L1	No, I think that's all.	
CY	Do you think that is about it?	
L1	Ja that's it.	
CY	Well L1 then that is it. I would like to say thank you so much for talking with me today.	

APPENDIX 18: Transcription of interview with learner (L2)

	Transcription	Memoing
CY	Thanks so much for coming and being part of my research work.	
L2	Hopefully I can make a difference in the process (laughs).	
CY	That's exactly one of the reasons why I am doing it, to see how it can be done in the most effective and efficient way. Alright then I need to just get your age and your grade.	
L2	My name is (name provided) I am in Grade 11 and I am 16 and about 7 months old.	
CY	Ok and then the next one. I am interested to know the accommodations that you have been granted and when you got them.	
L2	I got them going into Grade 10 and they were officially granted then by the IEB. So, the first one is an exemption from a First Additional Language. So I don't do Afrikaans or Zulu.	<i>Types of accommodations</i>
CY	Did that make a big difference?	
L2	A huge difference. It has really changed my life. It has been incredible.	<i>Advantage of accommodations</i>
CY	Ah I am so glad to hear that.	
L2	Then the second one is a spelling one. So, because of my dyslexia my spelling age is 7 years old. So that has also made a huge difference	<i>Types of accommodations</i>
CY	Yes, spelling is also a major one.	
L2	And then I write in a separate venue because I have an electronic reader.	<i>Types of accommodations</i>
CY	Ok and does the electronic reader work well for you? Is it the pen?	
L2	No, it's the IEB system I think it is a portal. And then also extra time, 10 minutes extra time per hour.	<i>Types of accommodations</i>
CY	Ok so those are good concessions. The next question is the role that the educational psychologist played in this whole process, so that would be (school psychologist). What does she have to do?	
L2	Hmm so I don't know how it exactly all started obviously it was with the parents.	<i>Parental influence</i>
CY	Were you at this school when the process started?	
L2	Yes, since Grade 8 before that I was at (name of school). Um but ja I think she contacted Mom and Dad to say that going forward you need to have IEB granted accommodations as opposed to just the school granted ones. So, then we started the process of gathering all the information and evidence of why I need them. And we put them all together and I think she said what we did and didn't need and then she sent them off to the IEB.	<i>Role of psychologist</i>
CY	Oh, ok so she put in the application. And then the assessment because that's also part of it, did she do the assessment?	
L2	Ah no I did the assessment with (external psychologist), but previously (external psychologist) had been my psychologist so I had a very comprehensive file. So, I had many academic assessments throughout my life.	<i>Collaboration external psychologists</i>
CY	Ok, so your mom had kept them all. That is great. She did it all right.	
L2	Ja (laughs) she kept everything.	
CY	So, let's look back at a time before you got your official granting of the accommodations. So that would be kind of your Grade 8 and 9 year. What help did you have then, what programmes or support did they have for you.	
L2	So here at (name of high school) they have what they call ASP (Academic Support Programme) so they have that here. So, at my	<i>Previous support</i>

	Transcription	Memoing
	previous school I had many different things so when I got here, they realised I did need a spelling concession. Obviously with my academic assessments prior they could see I needed one as well as the teachers that just met me, they could see I needed one from my writing.	
CY	Ok, so they gave you the internal accommodations.	
L2	Ja and they gave me the time, electronic reader and separate venue.	<i>Previous support</i>
CY	Ok so they gave you all of those. And at prep school can you remember any of the things you had there?	
L2	Um, so obviously in prep school you not really involved. But I did OT (Occupational Therapy) from six years and then speech therapy and remedial, I think. I am not sure what all of them were exactly, but I had a tutor called (name) and she was at the school. She would help me with homework most afternoons and then she would read through exams and tests. So, she was like my electronic reader. Often, they would have other peers help me like with Afrikaans, a girl that was bilingual would help me and she was really understanding.	<i>Previous support</i> <i>Early intervention programme</i>
CY	Oh, I didn't know that, that's lovely that they used the peers as well.	<i>Early intervention programme</i>
L2	Ja, so they did do a lot to help me.	
CY	In prep school. And then did that carry on here?	
L2	Ja, just here it was more formal whereas there it was unknown to me.	
CY	That makes sense. Ok then the next one. What are some of the challenges that you have had in terms of getting the accommodations?	
L2	There have been a few.	
CY	I am sure, it's a long process, so tell me about them?	
L2	So, are you asking about getting them or once I had them?	
CY	Getting them and at school as well.	
L2	So, the challenges are that sometimes I didn't have the accommodations, even in Grade 8 once we forgot to put it down so I didn't have spelling so that was a lot of pressure and very unsettling. There have been a few challenges when we heard back from the IEB. So, we submitted all of the forms in August of Grade 9 and we only heard back in January of Grade 10.	<i>Challenges of accommodations</i> <i>Long wait for formal accommodations</i>
CY	Wow, that is long.	
L2	Ja so going into Grade 10, I never knew if I was doing Afrikaans or not. So, I think that might have been on the school side and not IEB, but ja that was also a big challenge. And then in general I know with separate venues, because you kind of know who's in separate venues and get to know them. So, I know a girl there that's in Matric now and yesterday she wanted to write a test there and she types, but they said she couldn't have a separate venue even though she had arranged one. So, it very unsettling because often you don't get it even though you have arranged it.	<i>Challenges of accommodations</i> <i>Separate venue</i>
CY	That is frustrating- and you say you forgot to put it down for the spelling, where would you have to put it down?	
L2	Yes, so we sign a sheet before the exams saying that these are my concessions but obviously in Grade 8 you don't really know what's going on. It's a bit all new and nerve wracking, the whole new school, new system. So sometimes you don't check it properly or even if it was there it didn't get put through properly so for my Grade 8 November exams, I didn't have a spelling concession.	<i>Challenges accommodation administration</i>
CY	Ah shame that is hard, and they wouldn't change that?	
L2	No, so often here when things are done, they are done unfortunately. So that has been a big issue.	<i>Inflexibility</i>
CY	And in terms of the venues, do you write in all different places? Or do	<i>Separate venue</i>

	Transcription	Memoing
	you always write in one place so you know where you are going?	
L2	No, so for exams we always write in the Lab 2. So, it has a false wall, so all separate venue girls write there. And that definite for exams.	
CY	Aw well that's nice.	
L2	And then in Grade 8 you choose where you sit which is nice, but then sometimes new people come in and you like oh that's my spot, that my computer. But it's like please don't move. So, you get printed a laminated thing that says your name, your grade and the accommodations that you have. Then that gets stuck on the computer, but sometimes which is a big issue for all separate venue girls, is that they often are not working. They often have technical issues and things, it's just a constant that some aren't working.	<i>Challenges accommodation computer reliability</i>
CY	Oh ok.	
L2	Like the one computer hasn't been working since Grade 9 but they still put people there. And then they still have to move them during their exam every time.	<i>Challenges accommodations computer reliability</i>
CY	Oh, that is maddening.	
L2	So, it's very frustrating or you are putting it up, sorry mam the readers not working again, and again, and again Sorry mam the readers not working. So, it is often the same patterns continuing but no evident change. I mean I guess they try their best.	<i>Challenges accommodations computer reliability</i>
CY	But it doesn't get sorted in terms of the computers? Ja, that is very frustrating, and you are not allowed to use you own computer because I suppose of what people could have loaded on their computers.	
L2	I and I'm sure if you interviewed others, they would all say that about the computers, because it is very infuriating for us.	<i>Challenges accommodations computer reliability</i>
CY	So, it not just the load shedding that stops them?	
L2	No, it's the actual computer that often don't work.	<i>Challenges accommodations computer reliability</i>
CY	Are they too old, or ...?	
L2	I'm not entirely sure what the problem is. Ja, it's not to bad mouth anyone, but it's just very unsettling not to know if it's going to work or not. But the good thing about being in a separate venue is that it airconditioned which is sometimes amazing and sometimes not because some people like it freezing. So, for me I sit under the air conditioner, so I have to bring a blanket for every exam. And I just then write as usual.	<i>Challenges accommodations Computer reliability Advantage separate venue</i>
CY	Ok, ok. Is there anything else that's further to the challenges?	
L2	Well I know the challenges with getting your concessions there's reasons to them. So often that isn't communicated to all teachers. So, a lack of education towards the teachers so that they don't have a lack of understanding towards your challenges. Sometimes I know I think its Grade 9, I wrote a Geography test and wrote Sahara without an 'a' at the end. But then she was like but its phonetical you should know it Sa-ha -ra with an 'a' at the end". But I mean for me sometimes that doesn't click.	<i>Challenges accommodations collaboration with teacher</i>
CY	Of course.	
L2	So, for that one I didn't get the mark even though I had the whole concession.	<i>Challenges accommodations</i>

	Transcription	Memoing
		<i>collaboration with teachers</i>
CY	So, lack of communication to the teachers.	
L2	So, the teachers don't get communicated with or sometimes they don't even know you have a concession. So, like for extra time you supposed to arrange with a teacher to maybe start earlier or finish later. But sometimes with stressful lives you forget to tell them and then they don't even know you have a concession. I remember last year I was writing a Maths test and had extra time and then everyone finished writing and I still had extra time, but he didn't know about it. He went to speak to the HOD (Head of Department) and they had an argument outside the classroom as if I wasn't even there.	<i>Challenges accommodations collaboration with teachers</i>
CY	And whilst you trying to do your exam.	
L2	So eventually sometimes in test examples when it's not an exam, it's just a normal controlled test, you often don't want to use your concessions because it feels like you are an inconvenience to them. And not that people are judging, because they not but people look, and you know they look. So, it's not an issue if it's a lot of us.	<i>Challenges accommodation teacher's attitude</i>
CY	So, it would be more for the cycle tests? You have it sorted for the exams but its problematic for the class test more, is that right?	
L2	Ja, the controlled tests can be very frustrating.	
CY	Ja that is an issue because they use some of the marks from the controlled tests.	
L2	Ja so the Grade 11 that was writing yesterday, she was writing a controlled test and that's where the issue was. So often it's that. Then I know everyone has their own timetable, so it is acknowledged that we do need these and we not just trying to be difficult.	
CY	Exactly, they have been granted for a reason and you've been through a huge amount of effort to get them. Ok, so those are the challenges, we will now move on to the advantages. What are some of the advantages that you have experienced with your accommodations?	
L2	Well definitely having the accommodations have been a massive improvement. So, like Afrikaans was a big stress and very demoralising and infuriating to not be able to grasp anything. I went to extra lessons and I did try but I could just never improve the mark. And that was just so infuriating.	<i>Advantages accommodations stress relief</i>
CY	Ja and it's so time consuming.	
L2	Yes, and then from a younger age you just feel like you can't achieve it, so you just feel like giving up and then you have that sort of attitude towards other things. Which is not beneficial. So not having Afrikaans is amazing. It taken off that massive pressure from me.	<i>Advantages accommodations relief of pressure</i>
CY	Yes, ok. So that's the Afrikaans, has there been anything else?	
L2	Well spelling has been huge, that has been amazing because often in tests, exams or even assignments you to preoccupied with just trying to spell it correctly so you don't lose that mark. But when we're able to just write freely and not worry about it but rather just put your knowledge down on the page has been amazing.	<i>Advantages accommodations work to potential</i>
CY	Yes, and that's what it should be.	
L2	Ja I know when I was in Grade 8 and I didn't have the spelling concessions and some of the history words like 'bourgeoise' was just impossible. So, knowing that I had the concession, and it would be ok as long as she knew vaguely what I was trying to say made a huge difference. Whereas if I didn't have the concession it would be wrong, they would mark that as wrong. So, having it has been really incredible.	<i>Advantages accommodations working to potential</i>

	Transcription	Memoing
CY	Ja, and you think of it (spelling) as a small concession but actually it's just as important.	
L2	It really, really has been. So, I know like in English tests at the back you have a language section. Even though I have a spelling concession you can't like try and correct the spelling. So, you try your hardest on those but I'm not quite sure how they deal with that, but I know for me I kind of try skim over the Language section. Yes, it's like spot the incorrect spelling in this paragraph and I'm like well everything looks fine (laughs).	
CY	Ok, so those are some of the advantages then. Then your academic development in terms of having these concessions, have you noticed any change?	
L2	Yes, so accommodations have helped, it helped to level the playing field. It helped me to achieve my potential, obviously with dyslexia and ADHD you always have your ups and downs, it's not constant. But having the accommodations like some people see it at as plus, like oh she has this on top, she should be getting good marks. But it's not like that it just levels it. It just makes it a reality for us, like to bring us to a normal standard. So that has been amazing in my academic development.	<i>Advantages accommodation levels the playing field. Work to potential</i>
CY	And kind of in terms of marks, any developments?	
L2	It's kind of hard to gauge.	
CY	I suppose so.	
L2	Ja, so I know that in Grade 7 there was a huge jump but sometimes I think that just with yourself that somethings just click at a certain age. So, in Grade 7, I went from very low marks in English to 90's and it was incredible. So that was amazing. And here, well last year I can't really count because I had a few health issues, so I can't really look at those as a benchmark.	
CY	Oh, shame I'm sorry to hear that.	
L2	Yes, but I think it has definitely helped me academically and mark wise.	<i>Advantages accommodations improved marks</i>
CY	And then the other one, if you take the academics aside and we look at the other possible advantage in terms of the social and emotional advantages of having the accommodations, is there anything of this kind of thing that you can think of there?	
L2	Well I know that with the exams ... sorry I know that I just refer to them a lot.	
CY	No that's perfect if that where it affects you.	
L2	So, I know for having the accommodations and the separate venue you have a ... I don't want to say a community, but you do. And it's nice to have people that can relate to what you do, I mean we all have different exams and accommodations but it's nice. It's nice to have an understanding with others even if it's not the accommodations, it's the process or the issues that we all face.	<i>Advantages accommodations community relatedness</i>
CY	Yes, it's nice to have a group that you can all relate to.	
L2	Personally, I think it's helped my confidence grow. Because I know that it doesn't matter about the spelling, I can try achieve my potential and that helped build my academic confidence. Because, before it used to be a huge cloud hanging over me because spelling didn't show my actual intelligence so having that accommodation has boosted me a lot.	<i>Advantages accommodations Confidence andworking to potential</i>
CY	And any emotional spinoffs with other learners, or your personal development?	

	Transcription	Memoing
L2	No, I think it has, I think sometimes you carry a lot of the weight with you from primary school, but you just don't know it. Like in Grade 2 if you got full marks in spelling you would get a sweet and then in the end everyone in the class is getting it except for me.	<i>Barrier to learning early negative experience</i>
CY	Oh no that's horrible- that's really hard.	
L2	Ja and then in Grade 3, I would have to walk to the Grade 2 classes interrupt their lessons just to get my books, because I couldn't read the Grade 3 books. And that psychologically, not that it was damage because they were trying to help me, but that made me feel like an outsider.	<i>Barrier to learning early negative feeling</i>
Cy	Yes, they maybe could have fetched the books for you!	
L2	Or even just keep a few in the class. I mean it was not like I was reading a lot of them.	<i>Early intervention</i>
CY	Yes, exactly.	
L2	So, I just felt different. You know you had a tutor or someone to help you in exams and that was all something different. So throughout primary school, not that it's the school's fault, but you're interpreting what's happening around you, so you do feel like an outsider and different from the others.	<i>Outsider feelings prior to accommodations</i>
CY	Yes, I can imagine.	
L2	Then I think it was in Grade 5 , I don't know if it was the teacher's own idea but when I did well in a spelling test so the teacher wanted to show that, maybe she was the teacher that got the dyslexic to great spelling mark, but I had to stand in front of the class and she told everyone that I had dyslexia and that was just ... not that they responded in a way that was mean but for me it was horrible.	<i>Barriers to learning insensitive handling in prep school.</i>
CY	It seems unnecessary, yes.	
L2	So, for me it was horrible. So, when I came it was a fresh start only a few people from my primary school came, but I don't really interact with them. So, it was a fresh start and I had to tell no one.	
CY	Yes.	
L2	So, I haven't told anyone. I know like when I got the exemption from Afrikaans people asked out of curiosity, like how did you get it. And how can I get it. But I don't tell them now I just say "oh personal reasons". And that has been liberating in a way.	<i>Copying strategy with barrier to learning</i>
CY	Yes, and it is your knowledge to divulge if you want to.	
L2	Ja, and also like you feel like you should tell them and they're including you, but it good you don't have to tell.	
CY	It's your personal knowledge and its completely up to you. It's no teacher's business to be telling, especially to the entire grade.	
L2	But ja I know with the spelling like its personal. So, like I listen in class so that I don't have to reread my own notes and I'll read the classes notes because I can't really read mine. But ja, if I'm in class and someone asks can I read your notes it's like embarrassing because I know they won't be able to. And then you also want to like hide your stuff because you don't want them to judge you. Even though they probably won't.	<i>Barriers to learning Embarrassment</i>
CY	Yes.	
L2	And then also last year I had my best friend with me in English and she knew about everything. So, asking her for help was really easy and I didn't mind you know asking her for Spelling. But now I don't want to ask others, so I just randomly put what I think it is down. So ja I know that is a bit hindering.	<i>Peer assistance</i>
CY	Hmm yes, I suppose it can be. There is technology that does that for you.	

	Transcription	Memoing
L2	So, I do sometimes use that on my phone, but sometimes you use words that you used to saying but not spelling. So, you're not sure if it is the correct word that's been put down.	<i>Technological support</i>
CY	Ok, the last one that we are going onto. Are there any changes in the general process that you would like to see happen?	
L2	When gathering all the evidence to submit that wasn't an issue because my Mom and Granny had a comprehensive file. I think it was also trying to sift through what was relevant. That was quiet a-not-an-issue, cos I wasn't really involved in that. I remember being in the meeting but not really understanding or maybe listening to the details, so I don't really know how to respond to that.	
CY	Yes, and I suppose that wasn't really for you to have to do that part.	
L2	So, I know that when hearing back from the IEB, I think it was an issue on the school side more but that is a process I would like to see some change in it. From my experience it was a terrible not knowing when you would ever hear back., or if you had the accommodations or didn't. It was very stressful for me.	<i>Challenge accommodation delay in award</i>
CY	Yes, were you able to check in with the school psychologist?	
L2	Yes, I checked in with (school psychologist) multiple times and she just kept saying one more week, one more week until eventually I heard back. But I do think that that was a fault on the school side more.	<i>Challenge accommodation delay in award</i>
CY	Yes, so I wonder if she contacted the IEB to ask them what's going on.	
L2	I don't actually know, I popped in here often but I'm not sure what she actually did about it.	
CY	Ok, so there was no definite response.	
L2	Yes, with the implementation, it is a stressful thing having accommodations in the school especially in a busy and chaotic school, but maybe if there was more structure. I don't know how to put this but often you don't get told much or if the school is trying to implement and educate or raise, raise isn't the word, more like they want the students to leave here having time management and independence. So, after the start you have to arrange a lot of the stuff yourself but that is also, I mean we're still teenagers we do forget all these things sometimes. So that is sometimes stressful, and I think if there was a little more structure it would help a lot.	<i>Challenge accommodation more structure and help needed</i>
CY	Ok, I understand that.	
L2	Yes, and then the education of the staff. So, going into a new grade please let the teachers know and tell them.	<i>Challenge accommodation collaboration with staff</i>
CY	So, more transfer of knowledge?	
L2	Yes, because so many of them are oblivious or unaware of what we need or have. Some of them have heard about it or even have a daughter who has it, but it's different.	
CY	It is different, they are all different.	
L2	It is, it all plays out differently in students and all of us have different backgrounds and family history. So, if there could be more education and awareness. The girls are quite understanding and don't have that...I suppose they've grown up with it and its also been around them. But ja I don't know what else really to add.	<i>Accommodation acceptance peers</i>
CY	No that is great that helps guide me a lot.	
L2	You welcome I hope it can be useful.	
CY	Thanks, it gives us a lot of insight into accommodations, so thank you.	

APPENDIX 19: Transcription of interview with (L3)

	Transcription	Memoing
CY	I am going to put that there to record and then also just to let you know that the session is going to be recorded so that I can work with the information after you leave, but your name, which I have, and the school's name is not mentioned. You become L for learner and then a number, like 16 or 2. So when did you get your accommodations?	
L3	Last year	
CY	In Grade 8.	
L3	Yes	
CY	Oh fabulous. Did you have then granted to you in prep school?	
L3	Ja at my old school I did.	
CY	What was your old school?	
L3	A school in (name of country).	
CY	Oh, ok that's interesting.	
L3	Yes,	
CY	So, you are obviously boarding.	
L3	Uhum.	
CY	Ok and tell me what accommodations you have been granted.	
L3	A reader and a scribe and extra time so 10 minutes every hour.	<i>Types of accommodations</i>
CY	Ok and a venue to go with the scribe and the reader. And any First Additional Language exemption?	
L3	Ja.	
CY	That as well, ok. Is that because you never did Afrikaans in (name of country)?	
L3	Ja.	
CY	You came in as an immigrant status. Ok, so that is a different thing to an accommodation – immigrant status. Do you have to pick up another language? Do you maybe do French?	
L3	No, no languages.	<i>Types of accommodations</i>
CY	Great. Alright so that is when you got them, in Grade 8. And then the role that the educational psychologist played in you getting the accommodations. How did (school psychologist) help with the whole process.	
L3	I had to do a test with a lady.	
CY	Did you do the test with school psychologist?	
L3	No, a different lady.	<i>External assessing psychologist</i>
CY	In town?	
L3	No, she came here.	
CY	She came to you, oh perfect.	
CY	Ok so that was the start of it, the school psychologist organised, the test, and then how else did she help you.	
L3	She just tells me if I need anything.	
CY	Ok so in terms of if you need anything like a scribe or...?	
L3	Ja, I message her, like 3 days before and then ask her the venue. Like I tell her Geography and this time.	<i>School psychologist's role collaborating, organising</i>

	Transcription	Memoing
CY	So, she puts all of that in place. And when you have a separate venue do you always have the same place to go to.	
L3	It depends. In exams it changes but for the cycle tests it is always the library.	
CY	Oh ok, so you use the library predominantly.	
CY	And in cycle tests when you say it changes.	
L3	No, it changes in exams.	
CY	Ah yes, and where do you go for exams?	
L3	Depends, just like a free classroom.	
CY	Oh ok, so it's not always in a set room.	
L3	Mmh.	
CY	So that is how that works. Alright, anything else that she has to help with? So, she got you the test sorted out, she helps with the venue. Does she put any programmes in place for you, maybe extra lessons or a tutor?	
L3	Ah, I have a tutor.	<i>Support programme external tutor</i>
CY	Tell me about the tutor, how does it work.	
L3	She comes 4 or 5 times a week.	<i>Support programme</i>
CY	Ah ok so quite often. Most afternoons?	
L3	No, she comes during my FAL (First Additional Language).	
CY	Ah ok during your FAL lessons. That's a good idea and then she helps you?	
L3	She helps with what-ever. So, if I have cycle test on Wednesday, we will do Monday, Tuesday.	
CY	Oh, wow that is very organised.	
L3	She will help me, and she is a really nice lady. So, the first term my grades were really bad and then when I got her they just started going up.	<i>Positive attitude Marks improved with tutor</i>
CY	Oh fantastic, fantastic.	
L3	They went from like – I got 20% more.	
CY	No ways! That's a real amazing increase.	
L3	Ja.	
CY	And that is with having her and the accommodations... do you think?	
L3	The accommodations do help a bit.	<i>Advantage accommodations</i>
CY	Ok so sounds like a combination. Alright so we have done those questions and you have this amazing tutor, is she a student or a retired teacher?	
L3	Well, she used to work at prep.	<i>Support from local community</i>
CY	Ok.	
L3	She works with a lots of people.	
CY	Is she employed at the school or is she private?	
L3	I think she is private.	
CY	Right. And then some of the advantages of the accommodations, reader, scribe, venue, time, FAL exemption. Tell me the biggest advantage.	
L3	Probably the reader and the scribe.	
CY	Ok and how, just sort of put it out in words how they actually help you.	
L3	Well the reading helps a lot, because like in Science there is like difficult words and then they read it and I can understand it properly. If	<i>Advantage accommodations</i>

	Transcription	Memoing
	I read it by myself, I miss out. So, they help a lot. And then with a scribe it helps a lot because I can't read my writing and it just is all messy so with the scribe, I can read it.	<i>helps with understanding reading</i>
CY	And the scribe does she actually write it, or does she type it?	
L3	She writes it.	
CY	Writes it.	
L3	Ja, I prefer that.	
CY	You've got that. And probably the more you practice that the easier it becomes?	
L3	Ja I have done it like for 4 years.	
CY	Ok, ok so that means you did it in prep as well.	
L3	Ja,	
CY	Right and with regards to technology and scribing are you interested in that? Where you can do like Dragon Naturally Speaks and you talk and it types.	
L3	I have got that.	
CY	And what do you think?	
L3	I don't actually like it.	<i>Technology not helping</i>
CY	Not worked so well?	
L3	Ja.	
CY	Is it too stilted or what?	
L3	I don't know.	
CY	You just prefer the human.	
L3	Ja.	
CY	Well it is always interesting to hear. Alright so those are the pluses of accommodations and now the challenges. Can you tell me about the challenges that you have experienced with the accommodations? And that can be any challenges along the process – maybe start with the testing... (silence) did that go easily?	
L3	Ja.	
CY	The implementation? (silence...) does the scribe always arrive, does the reader always arrive?	
L3	Ja.	
CY	And the same person every time?	
L3	Ah, no.	
CY	Not. So, your psychologists put all this in place and there are no hiccups. That's really amazing.	
L3	We always do it early before time, we tell her a couple of day before.	<i>Role of school psychologist</i>
CY	When you say a couple of day, usually how many?	
L3	Two. And they (scribe/reader) are never late to the test. Even if we only tell her the day before the test, she (school psychologist) still gets it for us.	<i>Reliable readers and scribes Helpful/kind school psychologist</i>
CY	Gee that is amazing. And in terms of the venues you know where to go?	
L3	Ja.	
CT	That is really very organised, and it is really good to hear. Ok so challenges for you, kind of haven't had too many?	
L3	No.	

	Transcription	Memoing
CY	Fantastic, that is like how it should be working.	
CY	And then in terms of academic development so can you tell me if your marks increased with accommodations.	
L3	Ja they have – a lot.	<i>Advantage accommodations marks increase</i>
CY	Sort of 2%, 5% or more?	
L3	A lot, like at the start of the year I only passed like two exams and at the end of the year I only failed one.	<i>Advantage accommodations marks increase</i>
CY	That is very good that is amazing.	
L3	Ja, I passed all of them except for one.	<i>Positive effect of accommodation</i>
CY	Which one was that?	
L3	It was Geography. I didn't have the best teacher.	
CY	It happens sometimes.	
CY	Can you give me a % as to how much your marks have gone up?	
L3	My English was quite bad like 24% at the start and then I got 60%.	<i>Advantage accommodations mark increase</i>
CY	So, your English went from 24% to 60%.	
L3	I think the only steady one I had was like History. History I always passed.	
CY	Ok it's like your favourite?	
L3	EMS, I did well like I was getting 40's and 30's and then I got 60's.	<i>Advantage accommodations mark increase</i>
CY	That is an amazing increase. You must have been so chuffed.	
L3	I was. I was surprised. I was especially surprised about English.	<i>Advantage working to potential</i>
CY	That you actually had it all there.	
L3	Ja that I passed.	<i>Advantage working to potential</i>
CY	So, it was just to get it out.	
L3	Hmm.	
CY	Is there ever a time when you have to do a test without your scribe.	
L3	Ja, like if the teacher says ...	
CY	Do you mean like a spot test?	
L3	Ja, like that quite annoys me. So, like we had one last week in Geography and I didn't pass that one. But then they told us early and I passed that one.	<i>Teacher's lack of consideration</i>
CY	Because you could bring your scribe in?	
L3	Ja.	
CY	So, spot tests are difficult?	
L3	Yes, like I thought it said degrees, but it actually said distance cos I didn't read it properly, so I lost a few marks on that.	<i>Compromised if unable to access accommodations</i>
CY	Ja, ja. Ok, and are spot tests kind of the exception or do you have them every week?	
L3	It depends on the teacher.	
CY	Ok so that is the academic and then from a different perspective like from a social perspective, what are the other boys like with you having	

	Transcription	Memoing
	accommodations?	
L3	Its fine.	<i>Peer acceptance of accommodations</i>
CY	They don't mind. And from your own personal perspective what have you experienced with the accommodations?	
L3	It's been good.	
CY	It's been good. Just please give me a little more about that.	
L3	So, it helps a lot with the accommodations.	<i>Accommodations positive experience</i>
CY	Ok. Do you think it has built your confidence?	
L3	Ja it has.	
CY	Any other areas in terms of the sort of social, emotional things that you think you have felt an influence from.	
L3	No.	
CY	Not, ok. And then the last one, the last one is in terms of changes to the process. Think of the whole process, the test, the application, the waiting for the results from the application, the implementation from your psychologist the feedback from teachers and boys. What would you change in that whole process to make it better?	
L3	Like some teachers (English teacher) he made me like write a lot. And then like I wrote it, but I couldn't read it for notes.	<i>Teachers lack of understanding of barriers to learning</i>
CY	So, they don't have an understanding of it.	
L3	They do, they get told and like some teachers understand and some like don't.	<i>Teacher's understanding</i>
CY	Ok and so as you say that is teacher by teacher. Some get it and some don't.	
L3	And like my History teacher was really good last year. He helped a lot, and I understood the way he taught.	
CY	Was he more of a verbal teacher or did he bring in visuals?	
L3	A bit of both. I liked that because my History teacher now is quite verbal, she says a lot in one lesson. Whereas he would say a bit and then show us photos and then he would give us a worksheet and I understood that.	<i>Teacher's approach</i>
CY	Anything else that I haven't asked that you maybe want me to know.	
L3	No.	
CY	No, so then thank you so much, I really appreciate it, and I am going to turn it off now.	
L3	Sure.	

APPENDIX 20: Transcription of interview with learner (L4)

	Transcription	Memoing
CY	I just need to start off by saying thanks for agreeing to do the interview with me. I really do appreciate it. To start with I need to know where you heard about accommodations and your age and what Grade you are in.	
L4	I know about them from the school and I am 17 years old and I am in Grade 11.	
CY	Grade 11?	
L4	Yes.	
CY	And then the next one, I am interested to know what accommodations you have formally been granted. So, what has the IEB actually given you?	
L4	They have given me extra time. I think its 10 minutes for every hour and then I can work on a computer so I can type my exams.	<i>Types of accommodations</i>
CY	Ok and a separate venue? Did you get that with a computer?	
L4	Ja so usually like if we write in here say then I will probably go in the storeroom and then they will come to me there and tell me ...	<i>Types of accommodations</i>
CY	Ok so it works that way. Good. And were you happy with what you were granted?	
L4	Ja, I actually went for an Afrikaans exemption that's I why I went there.	
CY	So, you wanted exemption?	
L4	And I am going to do it again because I am still struggling.	<i>Reapplying for exemption</i>
CY	Ok.	
L4	Even though to start off my marks were just a bit over the pass mark, I am still struggling so I am going to go ahead and see if I can get it.	<i>Reapplying for exemption</i>
CY	Is it taking too much of you time?	
L4	Ja it is just I try my hardest and then it just doesn't work out and it is like taking away from my other subjects.	<i>Barrier to learning</i>
CY	What are your marks sort of looking like?	
L4	Well right now they are looking pretty good. But my first Afrikaans mark wasn't good.	
CY	Ok, I know the exemptions are hard to get. Alright let's look at our next one. The next one is the role that the educational psychologist at school plays in this whole process.	
L4	Well I haven't got to her yet. But I am going to go to her to try and do the Afrikaans, to go for another assessment.	<i>Role of school psychologist assessment</i>
CY	So, she is your assessment go to person?	
L4	And then before that for the other one when I went to have my assessment done and I went to I am not sure of the lady's name, but she lives right by (school name) and she lives there anyway.	<i>Previous external assessing psychologist</i>
CY	Ok so that is that part of it. And then who organises and picks up all the other parts of the accommodations.	
L4	(Teachers name).	<i>Collaboration between teacher and school psychologist</i>
CY	Ok so the two of them work together. Alright. Every school is different. It's just interesting to see. And then the next one looking back at a time before you were granted your accommodations. When did you get your formal accommodations?	

	Transcription	Memoing
L4	It was last year.	
CY	So, your Grade 10 year.	
L4	I had the concessions for the November exams at the end of Grade 9.	
CY	End of Grade 9. And before that, did they allow you informal accommodations. How did it work?	
L4	It was hard. I wasn't here in Grade 8, I went to another school and it was much different from this school.	
CY	Ok.	
L4	So, when I came here, I worked like a lot harder and then I got a concession cos they noticed that I should try and apply for one.	<i>Identification of need for accommodation</i>
CY	So, your other school didn't give one?	
L4	Ja they didn't they weren't doing IEB though they were doing (name of board of examinations).	
CY	Oh, ok yes. I know it ja. It's a different examination board but they do also have accommodations.	
CY	So, you found when you came to (present school) that they were kind of more on board in terms of concessions and accommodations. Great. And then following, when you were actually given the accommodations, how did things change in terms of school arrangements. So, what support did they put in place?	
L4	So they gave me a separate venue for the computer they told the teachers that I was allowed to type in class to take down my notes cos I obviously noticed that when I wrote it wasn't ... like it was better for me to type.	<i>Collaboration with teachers</i>
CY	And the teachers were all on board with that?	
L4	Ja	
CY	It's amazing it doesn't always just happen like that. Ok and then all your homework and that do you do your homework on the computer?	
L4	I mainly type Drama, Business and English.	
CY	And when you are typing in the class do you have a silent keyboard of do the kids around you not mind?	
L4	They don't really mind.	<i>Peer acceptance of accommodation</i>
CY	We are so used to computers.	
L4	Ja when everyone goes to work one day, they are going to hear that everyday so ...	
CY	I agree with you.	
L4	It's better than a typewriter!	
CY	Exactly.	
L4	Ja.	
CY	Well I am glad to hear that they don't make a fuss about it. And then we go onto the challenges and after that I will ask you about the advantages of the accommodations. So, what challenges have you experienced with the process. The process being at the beginning being identified and then the assessment and then the waiting for the IEB and then the implementation.	
L4	I think that um there weren't really many challenges when it got implemented.	
CY	When it got going.	
L4	Ja, but I think that just a challenge for me is the Afrikaans cos I feel like it is just I don't need it because it is not going to benefit me with later and then my Matric mark is this Afrikaans mark I tried my hardest.	<i>Challenge was not formally granted all</i>

	Transcription	Memoing
		<i>accommodation wanted</i>
CY	Mmm, ok so the challenge is for your part, is not getting granted all the accommodations that you asked for.	
L4	I guess it's a challenge either way. It's a challenge to get it and it's a challenge to try and you know do it.	
CY	Ja, I do understand. And then the advantages, so tell me a few of the pluses.	
L4	I think with the extra time I have time to ... whereas the other kids don't have time to check over their work. Now I wouldn't have had that time so now that I have extra time I can go and check and I can change things so that is an advantage.	<i>Advantage accommodation time to check</i>
CY	Do you find that your marks have gone up?	
L4	Ja and I feel like whereas if I didn't have it when we go through our exams or something like that then I can see that I used to make silly mistakes before and now I have time to check them.	
CY	So, you can catch the mistakes.	
L4	And with the computer I can take down notes faster, so I don't get left behind.	<i>Advantage accommodation time</i>
CY	So, the computer has helped in the classroom and then also your exams.	
L4	In my exams I use a different one cos obviously we can't have all the stuff loaded on it.	
CY	And does that work for you. Do you find you can change computers at school?	
L4	Ja.	
CY	I know you children are amazing with your technology. Anything else that has been a positive spin off. So, it's getting better marks, it is being able to keep up in class. Anything else?	
L4	I think that those are just the main two reasons.	
CY	Ok. We noted with the academics that you have gone up. Tell me the percentage increase.	
L4	I am not really sure cos I can't really remember my marks from last year (before accommodations). But I have improved.	<i>Advantage improved marks</i>
CY	Ok and any subject in particular where you have seen the benefit.	
L4	Well when I used to do Art and sometimes in English my teacher would tell me that I am writing a lot better with my computer. So, the way I explain things is much better on typing. She said the way you approach it is much different from when you were writing.	<i>Advantage accommodation work to potential</i>
CY	Ok well that is a good spin off. And then from a personal aspect so if we put the marks aside anything personal that you can think of.	
L4	I think that it has just taken a lot of stress away from finishing on time and stuff like that and in class like ahh she is going to go onto the next slide I can't get it down in time. So, it has just taken away a lot of stress.	<i>Advantage personal stress relief</i>
CY	So, your stress is greatly reduced. Is there any subject in particular where you think your stress is the most reduced?	
L4	I think Business and then English too.	
CY	Because they have so much writing?	
L4	Ja I think it is a lot of writing and you have to explain everything.	
CY	And then the last one. Any changes that you would like to see in the accommodation process. What would help?	
L4	Not really it flowed quite well. We waited a while for the IEB to say but	<i>Positive</i>

	Transcription	Memoing
	I mean they have a lot of stuff to do.	<i>accommodation experience. Delayed IEB review</i>
CY	Ok can you kind of remember the time span. Did you wait a month or two months or three months?	
L4	If I can remember I think it was a month or two months. So, it wasn't bad.	
CY	Okay so the process you say was quite slick. That is good you have a really jacked up school. Ok, so anything thing else asides from what I have spoken about that you would like me to know.	
L4	Not really.	
CY	Not, so for you apart from the Afrikaans you are kind of happy with how it has gone. Good luck with your next assessment and then the whole application again. But this time you know the process and sometimes when you know the process and you know what to expect it is a little less daunting. Thank you. I really do appreciate you doing this for me.	

APPENDIX 21: Transcription of interview with learner (L5)

	Transcription	Memoing
CY	Ok thanks so much for agreeing to do the interview. I really do appreciate it. So, if you are ready, Let's just go through the questions and I am just going to record it here ... and then that should be getting us recorded. And you know that when I transcribe it, I won't use your name anywhere. You become L 1,2,3 etc. So, the first one is just to confirm your age and your Grade.	
L5	I am 16.	
CY	And your Grade?	
L5	I am in Grade 10.	
CY	And I am interested to know what accommodations you have been granted?	
L5	Um, well I have been given a scribe with a separate venue and I have been allowed extra time	<i>Types of accommodations</i>
CY	Ok, so scribe, venue and time anything else?	
L5	And an exemption from Afrikaans.	<i>Types of accommodations</i>
CY	Ah ok.	
CY	So that is quite a big one the exemption from Afrikaans.	
L5	Yes.	
CY	Ah good. Alright and then the next one. The role that the educational psychologist plays, or the school psychologist plays. Can you tell me about that?	
L5	I have dealt mainly with (coordinating teacher's name) but they work together.	<i>Psych Collaborates with teacher</i>
CY	Ah ok, so at your school the psychologist and teacher work together? What support have they put in place for you?	
L5	Yes, so, we come here (room where interview being held) to do control tests and we get read for and scribed for.	<i>Separate venue</i>
CY	Ok, so they organise and arrange the accommodations for your control tests?	<i>Role of psych</i>
L5	Yes.	
CY	And they are always in this room?	
L5	Not specifically, cos I have a scribe so the kids that need extra time just come here.	
CY	Ok.	
L5	I need to go to another classroom to scribe.	
CY	And who usually scribes for you?	
L5	It either (teacher coordinator) or another teacher.	<i>Support from teacher</i>
CY	Ok ok, and in terms of the scribe has it taken a while to get used to it or was it something that came to you quite easily.	
L5	Quite easily because I can't put my thoughts down it is just very difficult so it's easier to say it.	
CY	And you are in the swing of that now? Good, good. And then the next one, is looking back at a time before you were granted your accommodations. So, I don't know when you were your accommodations officially granted?	
L5	Towards the end of October 2018 (Grade 8).	
CY	Okay and so prior to that when you were still waiting for them, what support systems were put in place?	

	Transcription	Memoing
L5	I didn't have anything.	<i>Lack of support in early Grade 8</i>
CY	Nothing before. Ok and in prep school?	
L5	Yes, I did have assistance before that, and I was granted to have a reader and extra time.	<i>Prep school support</i>
CY	So that was the reading they helped you with more than the writing.	
L5	Yes.	
CY	And the reader, did it go a long way in accommodating you or was it still hard to do it without help for writing.	
L5	I didn't have a scribe, so I didn't know how much I had missed out on. Whereas in junior school it was quite easy to make simple notes and I could just put it down on the page.	<i>Challenge of delayed implementation</i>
CY	So, the need has become more heightened when you got to high school?	
L5	Yes.	
CY	Ok, do you ever use technology for a scribe? Maybe 'Dragon Naturally Speaks'?	
L5	I don't. I actually have a C pen that I use. I got it when I was in Junior School and it really did help.	<i>Technological support</i>
CY	Oh, good. What is nice about it is that it makes you independent.	
L5	It does make you a lot more confident.	<i>Advantage self confidence</i>
CY	So, that was your accommodations before the formal granting of the IEB accommodations. Then you got the accommodations and then what was the help that was put in place after that?	
L5	Well then, I did get a scribe.	
CY	And do they scribe for all the tests or just the big ones?	
L5	It used to just be the big exams but last year it was a lot more organised and now they also do the others.	<i>Accom support at school improving</i>
CY	The have managed that for you. And any other assistance? Do you have any support lessons or programmes that you do?	
L5	I used to do extra Maths but now I do Maths Lit so it is a lot more technical which is more my speed. But no, not really anything else.	<i>No current extra support</i>
CY	So, then we are onto the challenges that you have experienced with the accommodation process and then later we will do the advantages. So, what has kind of been hard or difficult?	
L5	I think it was more difficult to understand why I didn't (initially) get that help because I have had this all through my life and coming through into Grade 8 and being the new kid who can't read doesn't help the situation.	<i>Delayed accommodations Frustration</i>
CY	That is hard.	
L5	So that really made it hard to be more social with my peers, so I skipped out on that. Which I would have anyway because I am not a very 'out there' person. I don't really like to have large groups of people around me.	<i>Social challenges</i>
CY	Ok, so you have your own style of friendship. So, what is interesting is that it flowed over into the social side of it. So that was the challenge. Anything else?	
L5	I think understanding why I had to go through the process.	<i>Frustration</i>
CY	Ok by the process you mean... the testing ... and all of that?	
L5	Why I had to have absolutely no help. I failed pretty miserably for three terms. I think that it also set me back in that I didn't get into seeing what subjects I was good at so when I had to choose, I didn't	<i>Challenge of delayed accommodations</i>

	Transcription	Memoing
	see what I was really good at.	
CY	I get that.	
L5	So, I really did have to do a catch up in Grade 9 and I luckily had amazing teachers who did assist and helped me pull through.	<i>Positive attitude and teacher support helped</i>
CY	Oh, good I am glad to hear that. And then the advantages what stands out as being the advantages of accommodations?	
L5	I didn't really take advantage of me being dyslexic I always thought it was just a thing I had to go through, but now I can see that I can actually have help and do something more than just pull through.	
CY	Have accommodations clicked your marks up?	
L5	Yes, I have improved a lot more than I thought, like to 70% I went from 60's to 70's to 80's.	<i>Advantage academic improvement</i>
CY	That's an amazing story so you went from the 60's to the 70's and touching the 80's. Have I got it right? Well done (L5). Any other pluses, so your marks and realizing that you could do more than just pull through. Anything else?	
L5	I feel that I can express myself freely. If a teacher asks me a question about it, I can answer a lot more. We had new teachers this year that didn't understand that I was dyslexic, so I was easily able to tell them this is my situation. This is why I can't read in class.	<i>Works to potential</i> <i>Self-advocates</i>
CY	Good and they have taken it on board. And were you identified with dyslexia with the IEB Accommodations test or did you come through from prep with it?	
L5	I came through with dyslexia.	
CY	Ok, so you knew you were dyslexic before you came here.	
L5	I have known since I was about Grade R. My teacher picked it up and said maybe you should get her tested. My mom was a teacher, and she has a little bit of dyslexia as well and my cousin came through with dyslexia so that helped to put it all together.	<i>Barriers to Learning</i>
CY	Ok, so you knew you were dyslexic, and it just had to be confirmed by the IEB before something was really acted upon.	
L5	Yes.	
CY	So, your advantages were the marks going up, being able to give more of yourself in the class and then from a different aspect, any difference that the accommodations may have had from a personal aspect?	
L5	I was a lot more confident in who I was and who I am as I have a confirmed diagnosis and I gained a lot more respect for myself and how I went through it and I just got through it.	<i>Emotional advantage increased confidence</i>
CY	Well that is great to hear that and in terms of the social side, once the children had the clarity on accommodations and dyslexia, how did it go for you?	
L5	It's a mixed batch. Some kids are really just so sweet they are very helpful and they understand my situation and other kids don't understand it so they do tend to make comments about it, but it happens in every school so.	<i>Acceptance of peers</i>
CY	So, you have kind of learnt to roll with it. Is that what I am hearing?	
L5	Yes.	
CY	And then the last formal question. In your opinion any changes that you could see with regards to the process, and it is quite a long process to get the accommodations. You have got to be identified and	

	Transcription	Memoing
	then it's the big formal assessment and ...	
L5	I had (private psychologist) do my assessment.	<i>Collaboration with external assessing psych</i>
CY	So, if you think of the whole process is there anything in that process that you could see that maybe you could refine or change a bit to be a better system.	
L5	The amount of time it took just to confirm that I was dyslexic and get the concessions and it wasn't like we hadn't had those assessments before and bringing them all our stuff and with the whole of my old teachers references.	<i>Challenge delayed implementation Frustration</i>
CY	So, there was a gap.	
L5	There was a large gap. I had the gap of Grade 8 and I got my concessions in Grade 8 October.	<i>Challenge timing of implementation of accommodations</i>
CY	So, it was almost a year.	
L5	So, I did miss out on quite a lot. I got them right before my exams.	<i>Frustrated</i>
CY	So, they came in the nick of time for exams. Well that is a hectic Grade 8.	
L5	Ja.	
CY	So formally that is all. Is there anything else that, in terms of the accommodations that I haven't asked or that you would maybe like to add a bit more to.	
L5	In terms of the accommodations just I haven't seen what they are doing now but I know that there are tons of kids coming through that are not going to survive what I went through.	<i>Traumatic experience delayed accommodations</i>
CY	Ok, so do you think a switch in the policy of the IEB or do you think it is just school policy that needs to change.	
L5	I think maybe there has been a change in the IEB policy cos I think that they have made one here.	
CY	And improved it?	
L5	I think so cos it seems like a lot more kids are coming through and saying, "Yes we are dyslexic" and are accommodated.	<i>Accommodation system has improved</i>
CY	So, you kind of had to blaze the trail and say I am not happy with this.	
L5	We had to say we are not happy with this.	
CY	Ok and from what you are saying it has eased up and the system has improved for those behind you.	
L5	They seem to have more help. Either from the school counsellor or ...	<i>Collaboration with school psych/counsellor</i>
CY	That's interesting and as I say it is testimony to your strength that you have been able to put that behind and move on. Thank you, is that (intercom) the sign for break. Ok, well that's good timing and so we can end now. Let's put it (recorder) off now.	

APPENDIX 22: Transcription of interview with learner (L6)

	Transcription	Memoing
CY	Hi thanks for agreeing to do the interview with me. I really appreciate the time that you have set aside for me. I have some questions that we are going to discuss but before that, I just want to confirm how old you are and your current Grade.	
L6	I am 17 and I am in Grade 11.	
CY	Seventeen and Grade 11. Ok can you tell me the accommodations that you actually got.	
L6	I get extra time and a separate venue.	<i>Types of accommodations</i>
CY	Time and a separate venue. OK. With regards to the educational psychologist, and obviously that is the school one, what role did you see that she played in the accommodation process. So how was she involved.	
L6	I never really went to the educational psychologist here.	<i>Role of school psychologist minimal</i>
CY	Ok ... so who oversaw your support programme.	
L6	I don't know who oversaw it but it would often ... it would be teachers that put me in the venue and they would put the time on the board and then they would swop out teachers every now and then. Sometimes it would be the educational psychologist sometimes it wouldn't be. But there was no, as far as I know for me, there was no definite person.	<i>Support from teachers</i> <i>School psychologist support</i>
CY	Ok so you didn't have like a meeting and then she tried out the support?	
L6	No.	<i>Role of school psychologist minimal</i>
CY	Ok. Well it all works in different ways. Um when you think back to the time before you were granted accommodations so may be that would be about Grade 8.	
L6	Grade 9.	
CY	Can you tell me some of the support measures that you had then?	
L6	I never really had any support measures cos I didn't know that we could get anything for support.	<i>Unaware of support</i>
CY	Ok so you didn't know about them. So how did you come to know about them.	
L6	Well I heard that there were some people getting grants and certain things that they were allowed to have during their tests and papers, so I thought ok that for me.	<i>Incidental awareness of accommodations</i>
CY	Ja ... laughs. Ok, so you heard just via the grape vine kind of thing from your friends.	
L6	Mmm.	
CY	Ok. Alright and then after getting the accommodations. So, once that letter had come through from the IEB. Then what support did you get? Did you go to any programmes here or anything like that?	
L6	There wasn't really much programmes but ja they sent me the letter and I just started right away with time and a separate venue.	<i>Implementation of accommodation</i>
CY	So, you didn't then go into extra English or anything?	
L6	Not often but it was always an option for those who needed it but.	<i>Some support</i>

	Transcription	Memoing
		<i>available</i>
CY	So, the option is always there but you didn't need it often.	
L6	Ja.	<i>Didn't take up on school support programme</i>
CY	Um. Ok, and the challenges what kind of challenges have you experienced with the accommodations.	
L6	Not really many challenges.	<i>Positive attitude</i>
CY	Ah good.	
P6	There are some teachers that come a bit late to start the exams but ... ja.	<i>Challenge of accommodations</i>
CY	Ja and when you have your separate venue has that been easy?	
L6	Ja it has been because we are told a week before your papers start where to write and our groups are often relatively small in terms of a separate venue. Like they will only let the Grade 10 to 11's write in the same venue.	<i>Organisation of separate venue</i>
CY	Oh good. And what separate venues do they normally give you? Where do they arrange that for you?	
L6	Normally we are in the Science block or the Maths block.	
CY	Ok and sort of how many children are put together for separate venue.	<i>Shared separate venue</i>
L6	About 10.	
CY	And you still feel that that is small enough to give you a benefit.	
L6	Ja.	<i>Positive approach</i>
CY	I see and in some ways 10 takes the pressure off, compared to if it is only you.	
L6	I get them for cycle tests too.	
CY	That's a big thing. It doesn't happen in all the schools. So, I am pleased that they have got that in place for you. All right and then the advantages, what pluses have you had with the accommodations processes.	
L6	There's a lot less stress when going in a venue	<i>Advantages of accommodations less stress</i>
CY	Ja.	
L6	I feel I can be more calm, I can take my time instead of rushing to finish it.	<i>Advantage accommodations calm</i>
CY	What a pleasure. And in terms of your academics have you noticed that the accommodations have had any effect on that.	
L6	I have improved in some subjects.	
CY	Oh, have you.	
L6	I don't know if it was the accommodations that helped me, but I think it was.	
CY	Ok and can you tell me what subjects in particular that you have improved in.	
L6	My Afrikaans and my English and Geography.	
CY	Oh, nice so are those the ones that have got the most language.	
L6	It's the longest papers, ja.	
CY	The longest ok. And sort of what percentage have you gone up 2%, 5%?	<i>Advantage academic results</i>
L6	For Geography at one point I was getting distinctions with extra time.	<i>Advantage academic results</i>

	Transcription	Memoing
CY	Oh wow, that is fantastic.	
L6	My Afrikaans was going up. It still is going up, but I don't know if that is because of extra time or just because I have a better teacher. I am not sure.	<i>Accommodation advantage Advantage of good teacher</i>
CY	Possibly at bit of both. Well I am glad that you have got the good teacher now.	
CY	How much extra time did you get in the end?	
L6	I get an extra 10 minutes an hour.	<i>Type of accommodation</i>
CY	And was that what you were hoping for?	
L6	I think it was.	
CY	And now with 10 minutes you can finish?	
L6	I can finish.	<i>Accommodation advantage, finish tests in time</i>
CY	And then when you look at it from a different perspective so taking away the academics and you look more at the sort of emotional development do you think that it has helped you in anyway there? You told me earlier that you feel calmer so ...	
L6	I do feel calmer.	<i>Accommodation advantage, calmer</i>
CY	That is part of the emotional thing. Anything else?	
L6	I don't think so.	
CY	Not in particular. Ok. Do you feel in anyway, that you are sort of better prepared to take on the school day?	
L6	I do ja.	
CY	Do you think it has had a broader take than just improving the subjects?	
L6	Mmm (nods).	
CY	Well that is also great to hear that. Then (P6) we are onto the last questions. If there were changes that you could make to the accommodations process and lets back track a bit and think of the whole process cos it is how you were identified or came to realise that accommodations were a possibility and then the assessment, then the application and then the sort of implementation. If you could think of the whole process what would you change to improve it along the way.	
L6	I don't think that changes need to be made. It was a short process it was done in about 2 days (assessment) it was quick.	<i>Positive experience of external psychologist</i>
CY	Ok	
L6	And ja, I enjoyed it.	<i>Positive experience of external psychologist</i>
CY	So that is the assessment part and then the rest ... the application ... how long did you wait to get your results? Can you remember.	
L6	I can't remember. Maybe a week ... I can't remember.	
CY	Ok so then it was quite quick for you. Right. And then the actual implementation is there anything that you could see improving for how venues are allocated or time?	
L6	I think if they just made it which ... I mean when we are switching our	<i>Challenge of</i>

	Transcription	Memoing
	classes so like from the Maths Centre to the Science Centre for exams, they can make that switch more clear to us so we don't walk to the wrong venue.	<i>accommodations collaborating with learners</i>
CY	Are ok so sometimes you are in the wrong place at the wrong time or Right time wrong place ... laughs.	
L6	Ok.	
CY	So, if I am getting it right it seems to be quite a smooth process for you?	
L6	Yes.	
CY	Well then you know that is great to hear that the accommodations are working for you. I am so pleased. (P6) is there anything that I haven't touched on that you want to bring up. Is there anything that you want to add to this accommodations story that you think I should know.	
L6	No, I am happy.	<i>Positive approach</i>
CY	You're happy ... then that is us. I am done. Ok thank you so much. I really appreciate it, especially at the end of the term when everybody is busy.	

APPENDIX 23: Transcription of interview with learner (L7)

	Transcription	Memoing
CY	Hi, thank you for agreeing to do this interview with me. I have your grade and age, and I really appreciate you doing this for me. Ok, so first of all then I need to know what accommodations you have been granted?	
L7	I have a reader and a scribe for my cycle tests, and I have tutoring.	<i>Types of accommodations</i>
CY	Ok, so you have a reader and a scribe and anything else?	
L7	And an exemption from my additional language.	<i>Types of accommodations</i>
CY	Ok so that's a reader and a scribe, and you probably get a separate venue with those do you?	
L7	Ja.	
L7	I usually do my cycle tests inside the library.	
CY	Ok, and do you get a bit of extra time because of the reader?	
L7	I get 10 minutes.	<i>Types of accommodations</i>
CY	Ok and out of those ones, which one has made the biggest difference?	
L7	I think it was my exemption from doing a second language.	
CY	Ok.	
L7	Like I don't know how to pronounce any words.	
CY	Ja, so that is a relief now.	
L7	Ja.	
CY	Ok and then the role that the educational psychologist has played so far (school) that is (name of psychologist) and how was she involved in it?	
L7	Well she helps with setting up all of the readers and scribes for us, like on a Monday you are supposed to ask her for our readers and scribes, so like the teachers have time to give the school psychologist the tests.	<i>Role of psychologist collaborates and organises scribes/readers</i>
CY	Ok, so she helps with that and did she do your assessment?	
L7	My assessment ... well she organised the reader and a scribe for me.	<i>Role of psychologist organises reader scribe</i>
CY	But in order to get the accommodation you would have probably had to do an assessment. Did you do the assessment in (town) and then submit it to the IEB?	
L7	Well, I am not really sure. I don't think that I really know about that.	
CY	Ok so maybe you did it before your got here. What school were you at before you came here?	
L7	(School's name).	
CY	Ah ok so you came from (name of country). Ok so maybe someone did an assessment there.	
L7	I don't remember that.	
CY	Oh ok. So (school psychologist) helps you with setting up all the readers and the scribes and anything else that she has to do for you?	
L7	Umm, I am not really sure. I think that if we have any problems with life or work, I think that we just come to her.	<i>Role of psychologist general support</i>
CY	So, like if you need an extra lesson or something?	

	Transcription	Memoing
L7	Um well, I don't think we come to her specifically I think ...	
CY	Do you go to your teacher first?	
L7	No, we come to (school psychologist) and she will email our parents and then she will like ask them like I think your son needs tutoring or something.	<i>Role of psychologist liase with parents</i>
CY	So, she is like your go to person who co-ordinates everything. Ok cool. And when you look back at your time before you were given accommodations what help did you get and in what Grade did you get your accommodations?	
L7	I got them in Grade ... I am sure I got them in Grade 10.	
CY	When did you come to (schools name) was it in Grade 8?	
L7	I came in Grade 5.	
CY	Oh, in Grade 5.	
CY	Wow, ok so Grade 10 you got your accommodations and before you got your accommodations?	
L7	I got them at prep as well.	<i>Early learning support accommodations</i>
CY	Ah ok, so you got them informally at prep. Good. And then Grade 8 and 9, before the accommodations were granted by the IEB what did you have then?	
L7	I started having extra English.	<i>Support programme</i>
CY	Ok, so you had your extra English.	
L7	That was for SAL.	
CY	What is SAL?	
L7	You get First Additional Language (FAL) and then you also have to do a second language.	
CY	Oh wow.	
L7	So, for my SAL I would do extra English and I got FAL granted in Grade 10.	<i>Previous support at High School</i>
CY	Ah ok. Um, and then once you got that piece of paper from the IEB and you got told ok you can have FAL exemption and you can have a reader and a scribe, um did you have any extra support since then. So, are you in any support now?	
L7	I go to a tutor normally like on a Sunday.	<i>Current support programme</i>
CY	Oh, wow ok.	
L7	And then she helps me with like if I have any homework or if I am studying, she helps me.	<i>Current support programme</i>
CY	And does that work well.	
L7	It does, ja.	
CY	Ok and she lives in town, or is she a student?	
L7	She lives in town.	<i>Support from local community</i>
CY	Ah ok. And then the next one, tell me what challenges you have experienced with the accommodation process, when you think back right from the beginning when you first applied.	
L7	Well at the beginning like with accommodations normally you have to like ask (school psychologist) and a challenge is like if you forget then it is normally on you if you have forgotten to ask (school psychologist) for a scribe.	<i>Challenge learner's organisational skills</i>
CY	So, you have to tell her?	

	Transcription	Memoing
L7	Ja, ja.	
CY	Ok and so that is the one challenge.	
CY	And the scribe, who scribes for you. Is it always the same person?	
L7	It isn't always the same person. It is normally a different person.	
CY	And can you manage with that?	
L7	I do manage with it. It helps you like... like normally if you don't have a reader or a scribe, I like zone out so I mistrack and then I don't know.	<i>Advantage reader scribe</i>
CY	So, the scribe helps you get your work down but it also helps you to stay on task. Am I right?	<i>Advantage less distractibility</i>
L7	Ja, ja.	
CY	Am I getting the right idea?	
L7	Yes.	
CY	Ok, so then the main challenge is to remember to ask for the accommodations.	
L7	Ja.	
CY	And anything else that you found challenging?	
L7	Um I don't think anything else.	
CY	Nothing else ok. So that's the challenges done. And then the advantages. What has been the biggest plus or advantage for you?	
L7	Well the biggest plus for me is like also the writing. In the tests that I do like sometimes I can't really write as quick as them, so they help me to make up time.	<i>Advantage speed of work improvement</i>
CY	To speed it up. Ja. Ok, so the scribing is an advantage. By the sounds of what you are saying a scribe has been really important to you.	
L7	Yes.	
CY	And the reader?	
L7	Ja.	
CY	How does the reader help you?	
L7	Well it just helps me like if you read it to me then, once you have read it to me then also like maybe there will be like a source. So, she can read that to me and then she can read me the question twice. Because like to takes me like I am a bit slow with my reading.	<i>Advantage improved pace</i>
CY	Ok so it also like speeds you up.	
L7	Ja.	
CY	Good, then your accommodations seem to be working for you. Have I got that right, is that how you are experiencing them?	
L7	Ja.	
CY	And then if you could tell me from an academic point of view, have you noticed that your marks have changed at all with the accommodations. How was it for you?	
L7	Well they did go up a bit but then like if you don't like, I know I have an advantage for like my reader and scribe she writes it for me but like the problem is you still have to write as much. Like you are telling her but like you forget to look at what is written down for you. And also, you have to like write to the mark allocation that has been given to you.	
CY	Ja, so it doesn't take away all of the difficulties. You still have to keep track of time and what you have put in. That is very valid.	
L7	Ja.	
CY	And if you could say how much your marks went up. Did they go up 2% or 5% or what?	
L7	I'd say they went up about, maybe about, like 4%.	<i>Advantage improvement in academic marks</i>
CY	Ok, ok. So, when you were in Grade 8 did you have all the	

	Transcription	Memoing
	accommodations.	
L7	No. I only got time. I only got extra time.	
CY	Alright and then from a different perspective, we have talked about the academics, and then from a personal level, how did getting the accommodations make you feel. How was it for you?	
L7	It was a big relief but then also you don't really want other boys to know. Ja it was, ja.	<i>Accommodation award relief Wary of boy's perceptions</i>
CY	Ok ok. And do the boys know now?	
L7	Ja, they do know.	
CY	And have the boys been easy on you?	
L7	Well some of them are a bit like, I don't think some of them understand so that is also one of the things that some people, they can't figure out like some people have difficulties like reading and writing down and just keeping up with time. Some people just can't understand.	<i>Acceptance of accommodations</i>
CY	Ja, ja I think they don't always 'get it'. And then anything in your opinion you would like to change in the accommodation process? How would you improve it.	
L7	Like, I don't know to answer this. So please just say that question again.	
CY	If you were doing this again, and getting the accommodations, is there anything that you would change in how the process works.	
L7	I would change like for some subjects, I don't even need a reader and a scribe, and like they are telling me to be quick and then I can't be quick.	<i>Lack of understanding teachers</i>
CY	So, is that the teachers telling you?	
L7	Ja, ja.	
CY	Ok so that is a very valid point about the teachers. Ok so that is all my questions. Anything that I haven't asked that you want me to know about the accommodations?	
L7	No, I don't have anything else.	
CY	Nothing else, ok. So then thank you. Thank you for doing this for me. Thanks for your time, I really do appreciate it. And I am going to switch this off now.	

APPENDIX 24: Transcription of interview with learner (L8)

	Transcription	Memoing
CY	Alright and the first thing then is just to say is thank you for doing this interview with me, as you know I am going to record it, but when it is reported your name and the school's name are not recorded. Ok so ready to start ... What age and what grade are you in?	
L8	I am in Grade 10 and I am 16 years old.	
CY	Grade 10 and you are 16. Ok and what age or grade were you when you got the accommodations.	
L8	I think it was Grade 4 or 5.	
CY	Oh so, you had them in prep?	<i>Early support</i>
L8	Ja.	
CY	Did you go to prep here?	
L8	Here.	
CY	Oh, wow. Alright so you got them in Grade 4, and then did you have them the whole way through prep?	
L8	Yes.	
CY	And they followed you through here or did you have a period where they said no try without them.	
L8	No, they followed me.	
CY	They followed you. Alright and then tell me the actual accommodations that you got.	
L8	Um mam, I had a reader. I have extra time and I had a scribe in prep, but I don't have one anymore.	<i>Types of accommodations</i>
CY	So, at the moment it is just a reader and time. And then a separate venue because of the reader?	<i>Types of accommodations</i>
L8	Ja.	
CY	And do you use the pen as a reader?	<i>Types of accommodations</i>
L8	No mam. I use a person.	
CY	You use a person. Ok. And a person for all of them or do they load some of your exams onto the computer and then you listen to them?	<i>Types of accommodations</i>
L8	I think that is either next year or this year.	
CY	Oh ok, so they move to that.	
L8	Ja, ok. Luckily, I am still with a person.	<i>Types of accommodation</i>
CY	Ja, exactly it works. Do you always have the same reader?	
L8	Um no, every exam, well every exam I have the same, but it switches, I think every term.	
CY	And the reader is it a person from the school?	
L8	They source them mam. Ms (school psychologist) gets them.	<i>Role of psychologist source readers</i>
CY	So, she organises all of that. So, the next question is to look back at a time when you had no accommodations, but for you if you got them in Grade 4, then that has kind of been your whole schooling.	
L8	Yes, it was quite early on about Grade 4/5.	
CY	And did you have to have a test in prep school?	
L8	I think I might have.	
CY	Ok, well it's a long time ago. And at that time did you go to any extra lessons or anything like that?	
L8	No, no.	
CY	So, they put your accommodations in and that was that. Alright and	<i>Early supportive</i>

	Transcription	Memoing
	then in high school now that you have your accommodations. Just tell me again, when were your accommodations formally granted?	<i>interventions</i>
L8	I was in Grade 8.	
CY	Grade 8, ok so they were quick to get it going. Alright and since you have been in high school, have they put you into any extra support to go with your accommodations.	
L8	I do have a Maths tutor.	<i>Support Programme tutor</i>
CY	Ok, ok.	
L8	On a Saturday morning he comes over.	
CY	Oh,	
L8	And he helps me with Maths.	
CY	And is that organised from the school?	
L8	It's just the school psychologist advised my parents and then we reached out and then they came.	<i>Role of psychologist liase parents</i>
CY	Ja, oh good oh good. Have you seen an increase in marks?	
L8	Definitely mam.	
CY	Really, so please to hear that. What kind of percentage 2,5,10?	
L8	5%.	<i>Advantage academic marks improvement</i>
CY	Fantastic.	
L8	So, I have finally got into the 60's.	<i>Advantage academic mark improvement</i>
CY	Well that is fantastic. That's good. Alright, and then the challenges in terms of the accommodation process. And just a reminder of the process is to identify you and then to do the assessment and then to get the IEB's feedback and then to implement them. So, in that whole process what challenges did you experience?	
L8	I don't think that there were many.	<i>Accommodations positive experience</i>
CY	Not that many. When they did the assessment, did they do that here or did you go to a private psychologist?	
L8	They did it at school, I think.	
CY	Ok, so the psychologist comes here. Did the school psychologist do it or was it another person?	
L8	There was another person which the school psychologist advised me to. And that lady, I did the first one at her office and the second one at school.	<i>External assessing psychologist</i>
CY	Ok so that worked for you. And then the implementation of the accommodations were there any challenges there?	
L8	No, it was quite quick.	<i>Quick implementation of accommodations</i>
CY	And the implementation? In terms of getting your reader and that. How does that go?	
L8	It goes smooth.	
CY	Smooth.	
L8	Like they always come.	<i>Implementation</i>

	Transcription	Memoing
		<i>of reader smooth process</i>
CY	That is just amazing. Hold onto those people. Are they part of the school?	
L8	I think most of them have something to do at school. Ok, I think they were teachers. We get quite old people.	<i>Support drawn from community</i>
CY	Ok,	
L8	I think they were teachers or are still.	
CY	That's probably why they are so reliable. They know the drill.	
L8	Ja.	
CY	Ok, good, so there were not really that many challenges for you, it goes well. And in terms of separate venue, how do you know about them? How do you know where to go?	
L8	Um normally when we get the reader, then the reader tells me we are going to Mr J's classroom or we are going to the library. So, they normally tell you when they come.	<i>Collaboration between reader and learner</i>
CY	Ok so where would you meet the reader?	
L8	Outside the exam venue. We just go to the side and everyone else goes in and we get our reader and go to a separate venue.	
CY	Oh ok. Wow that really seems to work well. Ok so then let's move on to the advantages. What kind of advantages have you experienced?	
L8	I think the way they read it to you. It kind of makes like sense. Whereas when you read it you are like kind of don't know what is happening but then they read it to you then you know, well they are asking for this, this and this.	<i>Advantage of reader</i>
CY	Ja, ja.	
L8	Ja.	
CY	Ok so you get a better understanding of it and therefore your answers are..	
L8	More accurate.	<i>Advantage of reader</i>
CY	Alright, um ok so that is that. And is there any subject in particular where the accommodation really works well?	
L8	Geography it has helped a lot.	
CY	Ok, ok. And are your marks clicking up in Geography?	
L8	Yes mam.	
CY	What are you getting now?	
L8	Right now, I am about 55ish.	<i>Advantage improved academic results</i>
CY	Ok and you started at?	
L8	Like 40.	
CY	Ja, well that is a big difference. That's a huge difference. Alright so you have seen that, and we have spoken about the academic development that your Geography mark has gone up. And any other spin offs in terms of academic improvement, or anything to note with that.	
L8	Well in Bio, we haven't written any tests or exams yet and then Business we haven't done any yet either.	
CY	Oh, ok so for those subjects, it's a bit early to tell. The Business has a lot of writing.	
L8	Ja, a lot of writing and definitions.	
CY	Ok. And then from a different perspective I am also interested to know with getting the accommodations has it made any difference personally or socially. What have the boys been like in terms of you	

	Transcription	Memoing
	having accommodations.	
L8	They are quite used to it they are like ok, ja you got a reader.	<i>Peer acceptance of accommodations</i>
CY	So, it is just part and parcel of what happens.	
L8	Ja, I think that everyone is quite used to it now.	<i>Acceptance of accommodations</i>
CY	Ja, I think so too actually. Ok and then that is the social side and then from a more emotional side do you think it has had any positive or negative spin offs.	
L8	I think it has been quite positive because I know I can trust them and they are always there to help you, even if you are not sure of the question and in the exam you can't ask them but with the reader you can ask them to reread the question. So, it's quite nice.	<i>Advantage accommodations reliability of readers</i>
CY	So, the reliability of them is a big plus.	
L8	Ja.	
CY	I can see that and in a way by having that person there, it takes away the drama with computers and load shedding and all of those things.	
L8	Ja.	
CY	Alright and then in your opinion, and this is the last formal question, in your opinion, are there any changes that you would make to the whole process. So again remember it as a process where you first get identified, then the assessment, then you had to wait for the IEB to roll it out, and then you had to get the implementation and organisations of the accommodations. So, think of the whole process and where would you make small or big changes.	
L8	I don't think I would make any changes because they know what they are doing and then it takes time, but you know you have got the proper people. You have got the help you need. So it's quite nice.	<i>Accommodation process positive experience Positive about support</i>
CY	It has worked for you?	
L8	Ja, you wait a bit but then it is worth it.	
CY	Ok and when you waited was it like a term or two terms. Can you remember?	
L8	I think it was almost half a term. Mine was quite quick.	<i>Accommodation review quite quick</i>
CY	Ok well then, I am pleased to hear that and if there is anything else that I haven't asked that you want me to know about that is particular to accommodations then let me know.	
L8	I think that is about everything.	
CY	About everything, all right so then I am finished with the formal interview. Thank you for that. I really do appreciate you doing this for me. I am going to stop recording.	

APPENDIX 25: Transcription of interview with learner (L9)

	Transcription	Memoing
CY	Hi, thank you for doing this for me. I really appreciate it. So as you know the interview is recorded but when I transcribe them when I put them into Word, then you become Learner (numbers) so that your name is not reflected and the same with the school and the psychologist.	
L9	Ok.	
CY	So, everything remains confidential.	
L9	Anonymous.	
CY	Alright so then the first one for me to ask is what accommodations you have actually been granted by the IEB.	
L9	Ok so when it comes to exams I go to a separate room so you have got a venue which I actually really enjoy because I have like privacy and all the other girls are not like watching you or how come she gets this or how come she gets that so that is really nice. And then I have an i-pad which reads to me for some certain subjects. Obviously for Mathematics you don't need any reading.	<i>Types of accommodations</i>
CY	So, you can choose, you can ask for a reader for any of them?	
L9	Ja, so they just give it to you, you don't have to ask. So obviously I also get extra time – 10 or 15 minutes per hour.	<i>Types of accommodations</i>
CY	And how much did you actually get from the IEB?	
L9	I think it is 10 or 15 min per hour, I am not sure.	
CY	No problem 10 or 15 min gives me the idea. And anything else on top of that any scribes or ...	
L9	No, I write it on my own.	
CY	And Afrikaans, do you do that.	
L9	So, one of the Afrikaans teachers she usually will read it for you, but obviously on the i-pad and it is recorded, like this.	<i>Types of accommodations</i>
CY	Ja.	
L9	And then you just select it and the Siri person reads it to you.	
CY	And how do you find that?	
L9	Well I like it actually better because you can adjust to the speed that you want it to be, so you can make it slower or faster or louder or softer.	<i>Advantages of electronic reader</i>
CY	Ok.	
L9	Rather than like in Afrikaans when a teacher like reads it like you can't slow them down. If that makes sense.	
CY	Ja it does. And in what Grade were you in when you got your accommodations.	
L9	Well when I got to the high school, I got all of this.	
CY	So, you got all of this in Grade 8. When did you do that big assessment?	
L9	Junior school Grade 6 or 7. I didn't use an i-pad then ok, and for some of the years we would go to a separate room and then someone would physically sit there and read it to you.	<i>Early support</i>
CY	Ok, and in terms of it formally being granted by the IEB you usually have to do that big assessment and then the school psychologist would have applied for you, can you remember when all of that happened?	
L9	No, I don't.	
CY	Did you go anywhere for a test, can you remember?	
L9	I can't remember. I want to say towards the end of Grade 7, but I	

	Transcription	Memoing
	honestly don't know.	
CY	Ok, then the next one here is the role that the educational psychologist played in the accommodation process. So, for you that would be (name).	
L9	Well she just makes us feel more comfortable because we are writing in a different venue not with everyone else. Obviously, we get more advantages, I don't know if that is the right word, we get more help compared to the other students so she just makes us feel comfortable and will guide us through everything.	<i>Role of psychologist emotional support</i>
CY	Oh good, so good to hear that. And any other role that she plays.	
L9	Well her and Ms J, Ms J is the Head of the academics, she also plays a big role to organise it. (School psychologist) mainly sits in the room with us when we are writing the exams and then sometimes there are like other teachers like subbed in cos obviously, she can't sit there the whole day. She needs a break as well.	<i>Role of psychologist for invigilation</i>
CY	Ja, ok so your Head of Academics also plays a role.	<i>Collaborative support/teacher</i>
L9	Ja.	
L9	She also organises everything.	
CY	Like the venues?	
L9	Well we all write in one venue it is actually right here, next door.	<i>Separate venue</i>
CY	Ok so that is quite nice cos you always know where to go.	
L9	Ja, so like it is not a different location.	
CY	And about how many of you are in that venue.	
L9	It ranges from like Grade 8, I don't think that Matrics write in that venue anymore. I think that they like write separately.	
CY	They have got somewhere else.	
L9	I don't know like in my Grade there is four of us.	
CY	So, it is quite a small number then. And um, if you can think back to when you didn't have the formally granted accommodations, what kind of support did you have? Did you have to go to extra lessons or reading programmes?	
L9	Well I used to go to this thing I think it was called like the Language School.	<i>Early supportive interventions</i>
CY	Ok.	
L9	I used to go there for nearly two years.	
CY	To help with your reading?	
L9	To help with my reading and spelling and everything like that.	<i>Early supportive interventions</i>
CY	Ok and any lessons at the school, did they have like a remedial teacher to help at school?	
L9	Well I went to Extra Maths lessons to help with my Maths. I can't remember any extra Afrikaans or English. I was offered it, but I don't think I went though.	<i>Early supportive interventions</i>
CY	Oh ok, it is always your choice. And then the challenges of accommodations?	
L9	Well I think that (school psychologist) took control of them and did a lot of the applying and that for us. And I am thinking that there was a meeting or something with her and (Head of Department) so they just explained what was going to happen and all of that and how everything was going to plan out.	<i>Role of psychologist application for accommodation and communicates with learners</i>
CY	Ok so (school psychologist) keeps you informed. Ja, ok.	

	Transcription	Memoing
L9	Ja, she is very helpful.	<i>Helpful school psychologist</i>
CY	And things like readers and venue are there any challenges there?	
L9	It is always organised. It is always in the same room, over here. I can't remember what the number is and then the teachers will like be (names school psychologist and three other teachers) they just like rotate and then and then if our i-pad is not working we can just like ask them.	<i>Accommodations well organised</i>
CY	So, then you don't ever have a person sitting next to you to read.	
L9	I always have an i-pad.	
CY	So that is the challenges and now on to the advantages of the accommodations. Tell me about that.	
L9	Well, I really like writing in a separate venue cos it is like almost your own space, it's a lot more like ... I don't know, better.	
CY	Ja.	
L9	I can just concentrate better in the smaller environment.	<i>Advantage of accommodation less distractibility</i>
CY	Ok, so that has made a big difference.	
L9	And obviously the reading i-pad, it does take a little bit more time cos you have to select everything and listen and then you sometimes want to go back, but I still would rather do it that way than reading it myself. Cos I would probably miss something.	<i>Advantage of accommodation reading fluency</i>
CY	So, the reader is an advantage for you.	
L9	Ja.	
CY	And the extra time, do you find that it is enough?	
L9	Yes, I usually use like the last 10 minutes to go over everything and go back to questions that I left out. So, I have enough time.	<i>Accommodation working well</i>
CY	Well done, that is great. Any other advantage that you can think of?	
L9	So when you are writing in that room you are writing with people that are doing exactly the same thing as you, basically, so they all have the earphones and they all have the extra time so it is a lot nicer cos you are in an environment where people are doing exactly the same thing as you.	<i>Advantage of accommodation community/ relatedness</i>
CY	So, they are all on the same page as you. They understand. And then with regards to your academic marks, have you noticed any change there with all your accommodations?	
L9	So, like we only get the accommodations for the exams. Well the extra time and the i-pads that is only for exams.	
CY	So, do you notice a difference?	
L9	Well usually the tests are like half or not even, quarter of the work, so I can't really say.	
CY	Ok, so you can't really compare them. I get it. Alright and with regards to other development, from a different perspective, if we focus on the personal development. Do you think having your accommodations has made a difference there?	
L9	I think it has made a positive influence. I am getting help and I am improving my marks or doing better at school with it, rather than looking down on myself. Like ah, I should have done better or something like that.	<i>Advantage accommodation personal development</i>
CY	That's great. And when you say you are doing better, is it better by 2%, or 5% or like 10%?	
L9	Um, I think that each year my marks improve, so they are slowly going up.	<i>Advantage accommodation</i>

	Transcription	Memoing
		<i>improved academic marks</i>
CY	Wow, that is like a ladder going up and up. And with regard to the social interaction with the girls how is the general class with regard to your accommodations?	
L9	Well usually the people in my Grade the four of us (who have accommodations) we just walk up to the room and we like test each other before hand to make sure that everyone is like covered on everything for the exam. So that is really nice.	<i>Advantage accommodations community relatedness</i>
CY	Sounds like you have become like a little group.	
L9	I am not really sure how the other Grades feel about it.	
CY	They don't make comments?	
L9	No.	
CY	Ok good.	
L9	Is it only in IEB that you get accommodations?	
CY	No, it is being used overseas. So quite long ago they started accommodations in the States, and in Britain and Australia and they sometimes have different names for accommodations. So, some of those ideas are being used here. And we now have them in some of our policies, so they are now in the South African schools. And the IEB have developed their own policy. The Government schools also have their own policy.	
L9	Ah ok.	
CY	And then to finish off. Are there any changes that you would make to the accommodation process?	
L9	No, I like the system and the venue, it's nice.	<i>Positive attitude to accommodations</i>
CY	I am so glad to hear that it is working for you and that the school has taken care of so many things in the accommodations. Is there anything that I haven't asked that you want me to know about the accommodations?	
L9	I don't think so. I think that we have covered everything.	
CY	Ok well we have been through all the questions. And you have really helped me with your answers and given me some ideas to consider. So, thank you for that, I really do appreciate it.	

APPENDIX 26: Transcription of interview with learner (L10)

	Transcription	Memoing
CY	Ok so let's start. Thank you for agreeing to do an interview. I really appreciate it. You know with the recording I don't put your name in the transcription, so you remain anonymous and there is no tracing back and I don't mention the schools name either.	
L10	Ja.	
CY	Ok so the first thing then, is just to know how old you are and what Grade you're are in?	
L10	I am 16 and Grade 10.	
CY	What accommodations have you been given?	
L10	Um, I get a reader, spelling, extra time and a venue and I get open dyslexia font.	<i>Types of accommodations</i>
CY	Ok so you use the dyslexia font. I am not sure if that is an IEB accommodation? And First Additional Language exemption do you have that for your dyslexia?	
L10	No.	
CY	Did you ask for a First Additional Language exemption and it was denied or did you not ever ask for it?	
L10	I don't know that my parents know that. I do struggle with my second language and I have to have a tutor.	<i>Parental intervention and support plan</i>
CY	Ah ok.	
	And what was the educational psychologist's (name) role in the whole process? So, try and think of the beginning of the process when you applied and then to the end when you were granted the accommodations.	
L10	Well my parents applied. My parents applied and I had to go for a 5 hour exam cos they test you on what accommodations you can get and then (school psychologist) gets the results and then they decide what you get prescribed from that test.	<i>Parental intervention Role of psychologist</i>
CY	Ok and then she sends it to the IEB, anything else that she has done?	
L10	She organises the venues and she tells all the teachers about the accommodations and the open dyslexia font and then when I write my exam she usually sits in the room.	<i>Role of psychologist collaboration with teachers</i>
CY	So, tell me a bit more about the open dyslexia font.	
L10	They give me my exams with one copy of the normal font and one copy of the other one. It makes a difference.	
CY	So, when did you first start using accommodations?	
L10	I got them in Grade 5, I think. I have got a genetic-dyslexia and my dad is also dyslexic	<i>Barrier to learning, dyslexia</i>
CY	Ah ok. Ok so, from Grade 5 you started to have accommodations. Was there ever a time in High School when you didn't have accommodations?	
L10	No, I got them right the way through.	<i>No delay in implementation of accommodations</i>
CY	And now that you are in Grade 10, what support do you have?	
L10	I do have a tutor. I have her twice a week. On a Tuesday and a Thursday. And then when I was in Grade 3 to 7 I went to the Reading Gym.	<i>Supportive interventions Early support</i>

	Transcription	Memoing
CY	Tell me about the Reading Gym, is it a programme at school.	
L10	No, it's a completely separate thing. It was 30 minutes of Spelling and then 30 minutes of Computer Reading and when we did the reading we practiced, and we did like experiments. So, we would have to read the experiment and then we would have to do it	<i>Early support in reading</i>
CY	Ah that sounds great.	
L10	It was actually not bad. And then I also had another person in the prep school. I went to her every week and she also helped me with my English and she was a Remedial teacher.	<i>Early supportive interventions</i>
CY	Ok.	
L10	And then I also had another person.	
CY	What help was she giving?	
L10	Also Remedial.	
CY	So, you had a lot of support when you were in the prep school.	
L10	Yes.	
CY	So now that you are in Grade 10 and you have got your accommodations are there any support programmes that you do.	
L10	So I have my tutor for Afrikaans. That is definitely my worst mark. And then also for Physics.	<i>Current supportive intervention</i>
CY	Ok and the challenges with the accommodation?	
L10	I think that the 5-hour test, it kills me every time I have to do it. So, every three years I have had to go back and do that 5-hour test. So, I did it in the beginning of Grade 8. That's definitely one thing that is really hard.	<i>Challenges accommodation application assessment</i>
CY	Ok so you did it in Grade 8.	
L10	Also doing the exams is fine, but I think my main struggle is just understanding some of the words... that is really difficult.	<i>Barrier to learning</i>
CY	Do you misread words?	
L10	Yes, all the time. Also in Maths this happens I switch my divide signs with my times signs and my plus and my minus. So, then I do the wrong thing.	<i>Barrier to learning</i>
CY	Do you get a reader in Maths?	
L10	No not in Maths.	
CY	And any other challenges?	
L10	Definitely spelling in normal every day, I can't spell. It is hard for me and I have to ask people and I feel like the most dumbest person ever. Specially like orange, or something stupid.	<i>Barrier to learning makes her feel stupid</i>
CY	So, your friends help you?	
L10	And sometimes, I have this thing on my phone and I type 'How do you spell this or that' and then it comes up.	<i>Technology support</i>
CY	That's good to remember. Those are challenges that are very real. And then tell me a bit about the implementation of the accommodations, who helps with that?	
L10	So they are very organised here, so (teacher) she co-ordinates that with (school psychologist) and then she prints out a thing for us that tells us where we have to write and what time and what subject.	<i>Role of psychologist Collaboration with teacher</i>
CY	And you get this before the exams.	
L10	Yes, so that is really cool.	
CY	You are right they are very organised. So those are the challenges. Then the advantages of accommodations. How is that for you?	
L10	The advantages, um. Definitely extra time.	<i>Advantage accommodations</i>

	Transcription	Memoing
		<i>extra time</i>
CY	How much time do you get again?	
L10	10 minutes per hour.	
CY	Ok.	
L10	It is interesting because my brother's is ADD as well and he finished Matric last year and he got 15 minutes extra time, for some reason.	
CY	Ok.	
L10	Which is very interesting for some reason. I don't know how he got 15 minutes. He went to (name of high school).	
CY	Is (name of high school) IEB, you will have to help me. I don't know all the schools here.	
L10	No.	
CY	Ok so there is a difference. There are different boards. I'm not sure maybe that is a reason.	
L10	So, ok the time that is definitely the one thing that helps. And also the reader, they put our exam on the i-pad and we have earphones and we can choose what part we want to hear, but the one thing that I don't like about that is the voice. It's so sort of chromatic it's not like a real persons voice.	<i>Advantage reader</i> <i>Challenge tone of readers voice</i>
CY	Ah ha.	
L10	But the one thing is, Afrikaans is my worst subject by far, is that the reader doesn't work with that so then the teacher, one of the teachers, whoever sets the exam has to read the exam. Then they put that on a different thing and then you can actually hear the voice. With Afrikaans it works probably the best.	<i>Human reader for Afrikaans works well</i>
CY	Ok well I am glad the reader is working well in Afrikaans. And in terms of marks have the accommodations made a difference?	
L10	Well, I know that. The first one was Maths in the prep school I failed Maths. I did not understand a thing. So, I had one teacher for two years and I got like solid 50's and 60's. Then I got a new teacher, and I didn't really like him. He was not engaged with me and I didn't find that he was the greatest and my parents did not like him either. And I dropped all the way to 10% in tests and I got a 1 on my report for Maths and then the next year I went back to 50's and 60's with the next teacher and then when I came to high school (name of teacher) was amazing, I got, at the end of the year, I got 80%.	<i>Improved academic results teacher input</i>
CY	That is fantastic.	
L10	Languages in Grade 8, English I got up to 70, which is impressive, and then last year I just went downhill.	
CY	Even with the accommodations?	
L10	Languages are not my strongest thing. I don't like reading. And that is the thing that I struggle with the most, it's definitely my languages. And then the other things are ok I guess.	<i>Accommodations don't take all problems away</i>
CY	And then from a different perspective. Sometimes accommodations have an influence on your personal development. Can you tell me if accommodations have influenced you emotionally or socially?	
L10	I definitely think that with my Maths, I was not confident in Maths what-so-ever, but I definitely think that I got more confident and especially in Maths the accommodations helped, but not so much in my languages.	<i>Advantage accommodations improved confidence</i>
CY	Ok, alright so you have experienced a 'click up' in self-confidence and anything else?	
L10	Not really.	
CY	And then the last one, are there any changes in the accommodation process that you would like to see happen?	

	Transcription	Memoing
L10	Ah that is a hard question.	
CY	Yes, I think that it is.	
L10	Well obviously the reading helps.	
CY	Ja.	
L10	Maybe a little bit more extra time, personally. Especially with English in like Paper 2, because that is where you write, and I take a while. Like sometimes I finish with 10 extra seconds to spare. It is very stressful.	
CY	Ok that is interesting. And if we go back to the process of accommodations, you know with (school psychologist) and (teacher) and all of those things.	
L10	No, I am happy.	<i>Positive about accommodation and help received</i>
CY	Ok so you are happy with how the system is working. That's really great. Well that is all the questions that I wanted to cover. So, thank you for answering. Is there anything about accommodations that I haven't asked that is particular to your accommodations, that you would like to tell me.	
L10	Not really, I am kind of happy with how it is.	
CY	Ok so then thank you so much for doing the interview with me.	

APPENDIX 27: Transcription of interview with learner (L11)

	Transcription	Memoing
CY	Hello, how are you?	
L11	I'm good thanks and you?	
CY	Ah, so good. Thank you for doing the interview with me. I really appreciate it.	
L11	Oh no worries, it's all good.	
CY	Ok so let's just get started then and the first is please tell me your age and the Grade that you are in.	
L11	Ah, so I am 15 and I am in Grade 10.	
CY	Ok, so 15 and Grade 10. And the accommodations that you actually got. Can you tell me what you were granted by the IEB?	
L11	I got a spelling concession, extra time and a reader and scribe.	<i>Types of accommodations</i>
CY	And with the time can you remember how much you got?	
L11	Ah, 10 minutes per hour.	<i>Types of accommodations</i>
CY	And then the school psychologist, so for you I think that is (name of school psychologist)) and if you can tell me what her role has been regarding you and your accommodations.	
L11	Well, I haven't really spoken to her about anything, but I know that she got my papers ready, but I have never really spoken to her about any of it.	<i>Role of psychologist Admin support</i>
CY	Ok, so she hasn't had a meeting or put you into support programmes?	
L11	No.	<i>Minimal contact with school psychologist</i>
CY	Ok, well you know there are all different ways that the school psychologists are doing this. So, all different! So, let's go on. Before you got the accommodations in high school, um what support were you in. And that would also include the prep school support.	
L11	Ja, so I had OT from like Grade 0 to 3. And then I had Speech Therapy from Grade 1 to 4 and then I had like a Remedial teacher from Grade 2 to 5. And I did extra lessons with teachers.	<i>Early intervention programme</i>
CY	Gee, you have done a lot when you were at prep school. Ok, and then now that you are at high school and your accommodations have been granted what support are you in?	
L11	So, I go for extra lessons. There are always like extra lessons available.	<i>Support programme Extra lessons</i>
CY	At school or privately?	
L11	Ja, at school.	
CY	And when do they take place.	
L11	It depends. Ja well there is like peer tutoring which is like the older grades tutor us in the mornings. And then after school there are extra lessons with the teachers.	<i>Peer tutoring support programme</i>
CY	Ok, that is interesting the peer tutoring. Are those the Grade 11's or 12's doing that?	
L11	Ja, the Matrics, they help out if we have a test coming up or something.	<i>Peer support programme</i>
CY	And does that work well?	
L11	Ja, well I have just been when there is a test coming up.	

	Transcription	Memoing
CY	Ok, ok.	
L11	So, there's about four Matrics with the class and whoever from our class can come.	<i>Peer support programme</i>
CY	Ah ok. That's a clever idea. And, then the challenges with the accommodations. Has there been any aspect of accommodations that has been hard for you?	
L11	Um not exactly like anything challenging. The only thing is that in the beginning I was very conscious of like walking through the whole school with my reader.	<i>Accommodation challenge embarrassment</i>
CY	Ok so you have a human reader?	
L11	Yes, ja. So, for exams I will always go to the same place. In the beginning I had to go ... I always had to go fetch my reader but now we have a venue that we will always go to for like different exams.	<i>Difficult to be seen fetching reader</i>
CY	So, is that better for you, so she can just meet you there?	
L11	Ja.	
CY	And is it always the same person?	
L11	Ja.	
	So, I have had two different readers cos I started with the one lady, but she couldn't ... like sometimes she would be away or something. So now I have a different reader who will be with me the whole way.	<i>Support programme reliability</i>
CY	Ok so now that sounds like it is working better for you. And then the advantages um the 'pluses' of accommodations. Can you tell me about the advantages?	
L11	So, it makes it a lot better cos in the separate venue I don't get distracted and the reader like helps me. So, I don't get distracted. And it is like a lot quicker for me cos usually I take like really long writing my exam cos I take long to read but the reader like, I take a lot quicker with her. So, she like just keep reading.	<i>Advantages accommodations less distractibility, good pace</i>
CY	So, she keeps you going?	
L11	Ja, like sometimes in an exam I will write a question and then look around, but if she is there then I won't do that.	<i>Advantage accommodation less distractibility</i>
CY	Ah ha.	
L11	Then also like I don't have to worry about my spelling ... or ja.	<i>Advantage not worrying about spelling</i>
CY	That must be a relief.	
L11	Ja, so I don't have to think out for so long how to spell the words.	
CY	So sometimes a spelling accommodation can have lots of pluses.	
L11	Ja, it sometimes also speeds me up.	<i>Advantage accommodation time saving</i>
CY	And then the next one. With the accommodations have you noticed any difference in your academic performance?	
L11	Ah ja. It has improved. Especially with like ... well with Maths it doesn't really make a difference cos it's like I can read that fine. But with like comprehensions and like essays and she has to read it to me then it makes a big difference.	<i>Advantage academic results</i>
CY	Ok, perfect. And sort of percentage wise, have the accommodations made a difference?	
L11	Ah, I think I have gone up by like about 5%. Ja.	<i>Advantage academic results</i>

	Transcription	Memoing
CY	So that is good hey, 5% makes a difference. It can be a big help in the end. So that is great, I am pleased to hear that. And then the next one. From a different perspective, from the personal perspective has there been any development or difference that you have noted personally since you have had your accommodations.	
L11	Well, the thing is like I don't have to worry about like finishing. I don't have to worry about not finishing and ja. I just feel a lot more confident going into the exam.	<i>Advantage personal development confidence and not worrying about time</i>
CY	Ok ok, so that is good. Anything else?	
L11	I can concentrate a lot better and ja.	<i>Advantage less distractibility</i>
CY	Ok, so that has also been a help. And then we are on one of the last ones now. The process in general, and it is quite a long process, so you will remember that it started off with you being identified as maybe needing accommodations, and then there is the assessment process and then there is the implementation of support. So, anything there that you could say that you would like to change. Maybe to tweak it and make it a bit better?	
L11	Um, I think it would have made a big difference if I could have these um things like earlier. I think my mom did try to get it but like they didn't really want to do that.	<i>Positive parent involvement Challenge in timing of implementation of accommodations</i>
CY	Ok.	
L11	So, at the end of Grade 7, I did have them for like a few of my exams but I think it would have made a big difference if I could have had them like earlier on.	
CY	I also think you have a good point. So, they can't grant it like formally in Grade 7, but you can at least like try them out. And then they can tell the person who is assessing how they worked. Ja, so I think you have raised an interesting point.	
L11	Ja, I waited a long time.	<i>Challenge of timing of implementation of accommodations</i>
CY	Ok well that is all our questions done. So is there anything that I haven't asked that you would like to tell me.	
L11	No, it's ok.	
CY	Ok so thank you for talking to me, I really appreciate it. I am just going to turn this recorder off now.	

APPENDIX 28: Transcription of interview with (L12)

	Transcription L12	Memoing
CY	Thank you for agreeing to do this for me and for completing the forms, I really do appreciate it. Can I start by confirming your age and grade?	
L12	I am in Grade 11 and I am 16 years old.	
CY	Ok, and I am interested to know what accommodations you have been granted.	
L12	I have got four accommodations. I use three of them. I use extra time, I got 10 minutes with my separate venue and I am allowed to wear my hearing aids during exams. And my Afrikaans accommodation I have not taken as I am still debating if I need this for my future career.	<i>Types of accommodations</i>
CY	When you talk about your hearing aids can you tell me some more details.	<i>Barrier to learning</i>
L12	So, I don't have a cochlear (device).	
CY	Ok,	
L12	I have hearing aids for both ears. So, because of the chemo that they gave me, it damaged the cochlear hairs inside my ear so that's what led to the deafness.	<i>Barrier to learning</i>
CY	Ah ok.	
L12	So, I wear hearing aids, um with regard to cochlear (device) I haven't applied for one and at first my um er, what they called now, my ear doctor, he said it wouldn't help me but then when I went back two years ago they said no, it's a good idea. So, I am not too sure what is going to happen there.	<i>Barrier to learning - hearing</i>
CY	Ah ok so that is what is happening.	
L12	So, at the moment I have hearing aids and oh ja, a special microphone that the teachers wear.	<i>Support device/ programme</i>
CY	Ok, I see. So, do you use that in the exam as well?	
L12	So, I can use my hearing aids in exam just to hear the invigilators but my Roger (microphone) I just use for class.	<i>Support programme</i>
CY	Ok, thank you that is interesting. How long ago did you start wearing your hearing aids?	
L12	When I was in Grade 0. They first realised it when I was about 5 years old.	<i>Barrier to learning</i>
CY	Ok, ok so you have been wearing them since you were 5. Right and then if we go onto the next one, could you describe the role that the school psychologist played in your accommodation process. I would like to know what the role of the school psychologist played in the accommodation process.	
L12	(Name of teacher) first recommended it to me when we were having a conversation about my disabilities. She was extremely helpful in the process and always keeping me updated. She suggested the education evaluator and helped with everything along the way.	<i>Collaboration between teacher and school psychologist</i>
CY	Um, you have told me about (Head of Enrichment Center) and how she helped you and recommended things for you. But she is your Head of the Enrichment Centre and she is a teacher. I was just wondering if any of the school psychologists were involved?	
L12	Um not to my knowledge. I had a different psychologist for my psych report from um what is her name (name of assessing psychologist). She did my assessment, so I am not sure about the Wellness Department, if they did anything in the process. I am unaware of it.	<i>Assessing psychologist Report</i>
CY	Ok, so you dealt with (assessing psychologist) and then mainly the Head of Enrichment Centre. Have I got it right?	<i>Collaboration with assessing</i>

	Transcription L12	Memoing
		<i>psych and teacher</i>
L12	Ja.	
CY	Ok thanks. And then looking back to the time before you were formally granted accommodations, maybe at prep school or early high school, could you maybe tell me about the support that you received then?	
L12	Um, I know in Grade 1, I went to one of the ladies there, I don't know exactly what she did, but she was like a psychologist. My Mom sent me just to know if there was anything bothering me with my disability. I didn't do any Speech Therapy or Remedial or anything. I just did a couple of extra lessons, if I was struggling with Afrikaans, with my teacher and that was about it. My teachers were always ready to accommodate for stuff I misheard or didn't hear.	<i>Early intervention Support programme</i>
CY	Ok thanks so following the granting of your accommodation can you tell me what support you received?	
L12	I received the same amount of support, I would say that I received before. I have found that teachers are always willing to help me with anything.	<i>Current support programme Support from teachers</i>
CY	Ok. And then onto the challenges, the challenges you may have experienced with the accommodation process.	
L12	None. Apart from a long wait. It was smooth and easy.	<i>Challenges of accommodations delay in accommodation review</i>
CY	Ok so you say you waited for a long time, was that waiting for a long time for the IEB to give you an answer or waiting for the school?	
L12	I think it was for the IEB to roll it out. And I think the reason was I applied quite late. And then at the same time as I applied, I didn't actually apply late, but when I applied the Matrics were all applying for their written concessions and stuff.	<i>Challenge delay in accommodation review</i>
CY	Ah ok so there was a bit of a backlog maybe.	
L12	Ja, that is what (Head of Academic Enrichment) talked about.	
CY	Ok that makes sense. Um alright and then I have just got a few more to do. In terms of the advantages that you have experienced with the accommodations. Can you tell me what you have noticed?	
L12	It has helped me more in stress coping in exams and tests.	<i>Advantage of accommodations Stress relief</i>
CY	Ok so it has helped you cope with the stress of exams and that. And I am interested to know if the accommodations have had an influence on your academic performance.	
L12	Um, I have been able to finish my tests and exams which has benefitted me in getting marks and the separate venue has allowed me to focus without distraction. It allows me to think clearer.	<i>Advantages academic results Minimises distractions</i>
CY	So, with regards to the marks, how has it been for you. Has there been any percentage increase with the accommodations?	
L12	Um, I will be honest with you I am not actually too sure. Maybe in my English writing marks, about a 5 to 10% increase because it has allowed me to write properly, I suppose.	<i>Advantages academic results</i>
CY	Ja.	
L12	Look, I think actually I don't know I feel that ja maybe in some subjects, but I haven't really noticed it. Maybe usually just a 1 or 2%	<i>Marginal academic results</i>

	Transcription L12	Memoing
	not huge it's just allowed me to focus more I think.	<i>advantage</i>
CY	Ok well that's perfect thanks.	
L12	Look, I have never really had a big problem with time. The time was a bit of a 'nice to have' that I could apply for by (assessing psychologist).	
CY	Ja.	
L12	So when she did my psych evaluation she found that I was actually seriously learning disabled, so she could not understand it exactly so she suggested that I went with the separate venue and extra time and it certainly has helped, I never thought that I would need it, but it certainly allowed me to not have to rush through my answers.	<i>Academic advantage not rushing - time</i>
CY	Ah well not having to rush ... that is fantastic.	
L12	Ja, so my main aim was to get the Afrikaans concession, but I actually still do Afrikaans.	
CY	You mentioned earlier that you were staying with the Afrikaans because of your future career. What are you hoping to go in to?	
L12	Ja, um, um Medicine. Ja, I want to become a Paediatric Surgeon, but I have spoken with the Wits Department of Disabilities and they said I could drop it but I haven't dropped it yet, that was just a few days ago that I spoke with them.	<i>Accommodation and University entrance</i>
CY	Ah ok, ok.	
L12	So, I will see if I drop it or not.	<i>Accommodations and school subjects</i>
CY	Ja. That's interesting. And then, any changes that you would like to see happen in the accommodation process.	
L12	My only change would be the pricing of the process. Well obviously, there are a lot of people out there that are at a disadvantage and they don't have medical aid just to pay like three grand to do the test. So, for it to be benefitting children. All children should have access to be able to apply, but unlike me who fortunately my parents could afford it, and some was covered by medical aid. Some children don't have that luxury and so therefore they are unable to get the best possible learning experience.	<i>Financial challenge</i> <i>Exclusivity challenge</i>
CY	Yes, I agree, it's very valid what you have said. Is there anything else that you would like me to know about accommodations, that I haven't asked you?	
L12	Um no.	
CY	Ok thank you, that has really helped me. And then hopefully when I get all my work back from Unisa, I will be able to share the results with you. I really do thank you so much for being so cooperative and helping me. Thank you.	

APPENDIX 29: Observation schedule for educational psychologist (P4)

Observation schedule		Participant's pseudonym abbreviation	P4
Date	Observations (Tick if behaviour observed)		Reflections/remarks
10 March 2020	✓	At ease	Welcoming.
	✓	Open and Communicative	Easy to talk to.
	✓	Cautious	Not guarded in communication style, but careful to state that specific comments are her personal opinions.
	X	Stressed	
	X	Confrontational	Has strong, individual ideas and values but not confrontational.
	✓	Congruence between verbal and non-verbal messages	
	X	Frequently has arms crossed	
	X	Emotional	
	X	Distant and evasive	
		Other:	Has personal ambition and is passionate about school and support.
		Other:	Possible dissent amongst the 3 school psychologists. Change in department staffing imminent.

APPENDIX 30: Observation schedule for educational psychologist participant (P6)

Observation schedule		Participant's pseudonym abbreviation	P6
Date	Observations (Tick if behaviour observed)		Reflections/remarks
14 Feb 2020	✓	At ease	Came to meet me at reception. Welcoming.
	✓	Open and Communicative	Tells it as it is.
	X	Cautious	Open and candid in discussion.
	X	Stressed	Busy but did not appear to be stressed.
	X	Confrontational	Not at all.
	✓	Congruence between verbal and non-verbal messages	
	X	Frequently has arms crossed	
	X	Emotional	Calm and controlled.
	X	Distant and evasive	
		Other:	Humble and coping with a high workload.
		Other:	Participant unaware of how good her systems are.

APPENDIX 31: Research diary for educational psychologist participant (P3)

Date	Participant	Main ideas from transcription/memoing notes	Reflections
5 th Feb 2020	P3	IEB Policy update - timing and distribution	<ul style="list-style-type: none"> Participant welcoming, calm and friendly.
		Test battery update	<ul style="list-style-type: none"> Has a wealth of experience with barriers to learning and accommodations but is humble and unassuming in conveyance of her opinions and ideas.
		Fairness of IEB review of application report	
		International accommodation policy	
		Relevance of barrier to learning to accommodations	<ul style="list-style-type: none"> Positive attitude that permeates her dealings with people and regard for policy.
		Collaboration between High and Prep schools.	
		Collaboration with local community	<ul style="list-style-type: none"> Cares deeply about the well-being of learners.
		Collaboration with teachers	<ul style="list-style-type: none"> Speaks highly of the teacher that assists her with the implementation of accommodations.
		Support plan	
		Admin challenge	
		Timing challenge	<ul style="list-style-type: none"> Encouragingly proactive in her thinking and looking for ways to provide the best service to school and learners.
		Resource challenge	
		Parental pressure	
		Personal development advantage	<ul style="list-style-type: none"> At times, I had to refocus the direction of discussion as the participant was inclined to wander off topic.
		Improved academic results advantage	

APPENDIX 32: Research diary for educational psychologist participant (P5)

Date	Participant	Ideas to follow up from transcriptions/memoing notes	Personal views/opinions
5 th March 2020	P5	On site knowledge of accommodations	<ul style="list-style-type: none"> Participant was friendly and welcoming. Discussion had an easy flow and the participant communicated openly. Highly invested in her position as school psychologist and loyal to school. Primary interest is therapy. In some respects, still finding her way with accommodations. School well established but only been registered with IEB for 4 years. Team-player referred often to part-time school psychologist that works with her. Complimentary to teachers that assist her with the implementation of accommodations.
		IEB Policy Knowledge	
		Opinion of IEB Policy	
		International accommodation policy knowledge	
		Relevance of barrier to learning	
		Relevance of cognitive neuroscience	
		Types of accommodations	
		Financial challenges	
		Early intervention support programme	
		Collaboration with community	
		Timetabling challenge	
		Pressure from psychiatrist challenge	
		Fairness of accommodations	
		Acceptance of accommodations	
		Collaboration with school psychologist	
		Parental pressure	
		Support programme	
		Advantages personal development and improved academic marks	

APPENDIX 33: Research diary for learner participant (L8)

Date	Participant	Ideas to follow up from transcriptions/memoing notes	Personal views/opinions
14 Feb 2020	L8	Types of accommodations	<ul style="list-style-type: none"> Participant was polite and well-mannered.
		Role of school psychologist collaborates with readers/scribes/parents	<ul style="list-style-type: none"> Participant was relaxed and at ease.
		Support programme involves a tutor from local community	<ul style="list-style-type: none"> No evidence of nervousness or reluctance to engage in interview.
		Advantage of accommodations, increase in academic marks	<ul style="list-style-type: none"> Discussion had an easy flow and participant readily communicated thoughts and experiences.
		Accommodation process a positive experience	<ul style="list-style-type: none"> Positive, upbeat response style evident.
		Positive in response to tutor	
		Peers acceptance of his accommodations	
		Accommodations IEB review quite quick	

APPENDIX 34: Research diary for learner participant (L3)

Date	Participant	Ideas to follow up from transcriptions/memoing notes	Personal views/opinions
14 Feb 2020	L3	Types of accommodations	<ul style="list-style-type: none"> • Participant was polite and respectful. • Appeared relaxed and there was no evidence of nervousness or aggression. • Response style was typically brief. • Could elaborate if probing questions asked. • Positive attitude towards the school psychologist and personal tutor. • Seemed at ease talking about the learning difficulties that he experiences.
		External assessing psychologist role in accommodation process	
		Collaborative role of school psychologist	
		School psychologist kind and understanding	
		Tutor from local community important in support programme	
		Advantage of accommodations increase in academic marks	
		Advantage of accommodations, able to work to potential	
		Need for teachers to consistently be understanding of learners' accommodations and their barriers to learning	
		Learner compromised if unable to use reader	

APPENDIX 35: Data codes

Codes	
AA	Accommodations assessment
AAR	Advantage academic results
AcA	Acceptance of accommodations
AC	Admin challenges
APD	Advantage personal development
BtL	Barrier to learning
CA	Commonly awarded accommodation
CNS	Cognitive neuroscience
CSC	Collaborative support from community
CSL	Collaborative support from learners
CSP	Collaborative support from parents
CSPs	Collaborative support from psychologists
CSIS	Collaborative support between schools
CST	Collaborative support from teachers
DC	Doctors challenge
EC	Exclusivity challenge
EIP	Early intervention programme
FA	Fairness of accommodations
FC	Financial challenges
FS	Flexibility of support
FQ	Further qualification
IEBP	IEB policy
IEBT	IEB training
IPSA	Inclusion policy South Africa
IntP	International inclusion and accommodations policy
IP	Internal politics
LI	Learner independence
LS	Levels of support
NA	Negative attitude
NAA	Non acceptance of accommodations
OSK	On-site knowledge
PA	Positive attitude
PC	Physical challenges
PI	Parental involvement
PP	Parental pressure
R	Report
RA	Review of application
Res	Resilience
RC	Resource challenge
RP	Role of psychologist
SA	Self-advocate
SC	School communication challenge
SP	Support programme
TA	Types of accommodations
TB	Test battery
TC	Timing challenge
TeaC	Teacher challenge
TS	Technical support
TT	Timetable
UniT	University training

APPENDIX 36: Themes, subthemes and codes

Themes	Subthemes	Codes
Theme 1 Inclusion and accommodation policies	1.1 School psychologist's awareness of inclusion and accommodation policies 1.2 School psychologist's perceptions of the IEB accommodations and exemptions policy 1.3 Challenges experienced with the distribution of the IEB accommodations and exemptions policy 1.4 Limitations of the IEB accommodations and exemptions test battery	UniT IEBP R Int P TB
Theme 2 Types of accommodation	2.1 Types of accommodations accessed at the schools 2.2 Commonly awarded accommodations	TA CA
Theme 3 Advantages and challenges of accommodations according to the school psychologists.	3.1 Advantages of accommodations - Improved academic test results - Improved personal development 3.2 Challenges of accommodations - Physical resources - Financial resources - Human resources - Time resources - Parental pressure - Fairness of accommodations	APD AAR PC FC SC TC PP PC AA
Theme 4 Support provided to learners with accommodations	4.1 The role the school psychologist's knowledge of barriers to learning and cognitive neuroscience plays in shaping support for learners 4.2 School psychologist's role as coordinator of support 4.3 Support from an exosystem context 4.4 Support from the mesosystem and microsystem contexts	BtL CNS LS RP CST CSP CSL CSC CSPs PA IP
Theme 5 Advantages and challenges of accommodations according to learners	5.1 Advantages of accommodations according to learners - Improved academic test results - Improved personal development 5.2 Challenges of accommodations for learners - Physical resources - Financial resources - Human resources - Time related resources	AcA AAR APD PA NA PC FC SC TC

APPENDIX 37: Permission letter from IEB Chief Executive Officer to use content of IEB B1 Policy and Procedure Accommodations and Exemptions



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3 September 2020

Ms. Claire Yorke and Professor D Kruger
UNISA
P O Box 393
UNISA, 0003

Dear Ms. Yorke

Research in Accommodations and Exemptions

Referring to your email dated 31 August 2020, the Independent Examinations Board (IEB) has no objections with your use of the IEB B1 Policy and Procedure Accommodations and Exemptions and the contents thereof for your doctoral research. B1 Policy and Procedure Accommodations and Exemptions has been developed by the IEB and is copyrighted by the IEB. This must be acknowledged by the researcher in her thesis.

This permission is granted provided that submission to the IEB, before publication, of any articles which might arise from the research, for comment.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Anne Oberholzer', with a horizontal line underneath.

Anne Oberholzer
CEO

Cc: R Mowatt
Prof Kruger