

Utilising participatory reflection and action to develop a postgraduate qualification in visual impairment studies

by

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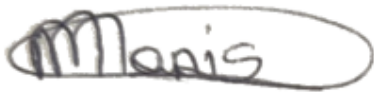
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DECLARATION OF ORIGINALITY

I, Maesala Manis (04414675), declare that the thesis titled “**Utilising participatory reflection and action to develop a postgraduate qualification in visual impairment studies**” which I hereby submit for the degree Philosophiae Doctor at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

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.....
Maesala Manis

31 March 2020

ETHICAL CLEARANCE CERTIFICATE



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CLEARANCE CERTIFICATE	CLEARANCE NUMBER: UP 17/06/01 Ferreira 17-003
DEGREE AND PROJECT	PhD Utilising participatory reflection and action to develop a postgraduate qualification in visual impairment studies
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- Compliance with approved research protocol,
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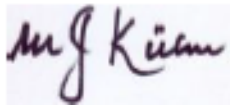
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TO WHOM IT MAY CONCERN

I, the undersigned, hereby declare that the doctoral thesis titled **Utilising Participatory Reflection and Action to Develop a Postgraduate Qualification in Visual Impairment Studies** by **Maesala Manis** has been edited for grammar errors.

It remains the responsibility of the candidate to effect the recommended changes.



Prof. Tinus Kühn

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Have I not commanded you? Be strong and courageous. Do not be afraid; do not be discouraged, for the Lord your God will be with you wherever you go.

Joshua 1:9

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This study has been completed as part of the Teaching and Learning Development Capacity Improvement Programme which is being implemented through a partnership between the Department of Higher Education and Training and the European Union. The content of this thesis are the sole responsibility of the researcher (as part of a broader research team) and cannot be taken to reflect the views of the European Union.

ABSTRACT

Following the inception of the White Paper 6 in 2001 (Department of Basic Education, 2001), selected schools in South Africa have been transformed into inclusive schools, with the aim of enrolling all learners despite their (dis)abilities. Teachers however still seem hesitant to take care of this responsibility due to a variety of reasons. Against this background, the Department of Higher Education and Training, in collaboration with the European Union has undertaken an initiative focusing on the promotion of inclusive education policy implementation and teacher training in South Africa. As part of this initiative, the University of Pretoria was tasked to develop a postgraduate qualification in visual impairment studies.

My study forms part of the broader funded project of the University of Pretoria. More specifically, my study focused on the process and value (or not) when utilising Participatory Reflection and Action (PRA) for the development of a qualification. Based on the assumptions that teachers and expert stakeholders in the visual impairment community would be able to co-conceptualise an advanced diploma for teachers, 17 schools were involved, situated in five South African provinces, with 255 teacher-participants. In addition, 50 expert stakeholders in the field of visual impairment participated in this study, which adopted a participatory research approach, implemented an instrumental case study design and utilised interpretivism as paradigm. For data generation and documentation, I relied on PRA-based activities, individual interviews, observation, field notes, a reflective journal and audio-visual techniques.

Following inductive thematic analysis of the data that apply to the focus of my study I identified four main themes, with the related subthemes. These themes relate to utilising PRA to access research partners' knowledge and expertise, value for participants of being research partners in a PRA process, value for personal and professional development of the participants and recommendations for future application of the PRA process. Findings of my study indicate that it is possible and beneficial to implement PRA when conceptualising a qualification. More specifically, PRA is suitable for accessing research partners' knowledge and expertise when

developing a qualification. PRA empowers participants to instil positive change and further equip themselves.

KEY CONCEPTS

- ❖ Advanced Diploma in Visual Impairment studies
- ❖ Expert stakeholders
- ❖ Full service schools
- ❖ Inclusive education
- ❖ Participatory Reflection and Action (PRA)
- ❖ Postgraduate qualification
- ❖ Programme development
- ❖ Special needs school
- ❖ Visual disability
- ❖ Visual impairment.

LIST OF ABBREVIATIONS

DBST	District-based support team
DHET	Department of Higher Education and Training
EC	Eastern Cape (province)
EU	European Union
FSS	Full Service Schools
FS	Free State (province)
GP	Gauteng (province)
IE	Inclusive education
KZN	Kwa-Zulu Natal (province)
LP	Limpopo (province)
LSA	Learning support advisor
LTSM	Learning and Teaching Support Material
LVI	Learners with visual impairment
NQF	National Qualification Framework
PRA	Participatory Reflection and Action
SBST	School-based support team
SIAS	Screening, Identification, Assessment and Screening
SNS	Special needs schools
VI	Visual impairment
WP	White Paper

TABLE OF CONTENTS

DECLARATION OF ORIGINALITY	i
ETHICAL CLEARANCE CERTIFICATE.....	ii
DECLARATION FROM LANGUAGE EDITOR.....	iii
ACKNOWLEDGEMENTS.....	iv
FINANCIAL SUPPORT.....	v
ABSTRACT	vi
KEY CONCEPTS.....	vii
LIST OF ABBREVIATIONS.....	viii
TABLE OF CONTENTS.....	ix
LIST OF TABLES	xvii
LIST OF FIGURES.....	xviii
LIST OF PHOTOGRAPHS	xix
CHAPTER 1 - SETTING THE SCENE AND CONTEXTUALISING THE STUDY.....	1
1.1 INTRODUCTION AND CONTEXTUALISATION OF THE STUDY	1
1.2 OVERVIEW OF THE BROADER EU/DHET-FUNDED RESEARCH PROJECT	4
1.3 RATIONALE FOR UNDERTAKING THE STUDY.....	5
1.4 PURPOSE AND AIMS OF THE STUDY	8
1.5 RESEARCH QUESTIONS.....	9
1.6 WORKING ASSUMPTIONS	10
1.7 CONCEPT CLARIFICATION	10
1.7.1 Participatory Reflection and Action (PRA).....	11
1.7.2 Development of a postgraduate qualification	11
1.7.3 Visual impairment.....	12
1.7.4 Inclusive education.....	13
1.8 CONCEPTUAL FRAMEWORK.....	14
1.9 PARADIGMATIC PERSPECTIVES	17
1.9.1 Epistemological stance.....	17
1.9.2 Methodological approach	19
1.10 RESEARCH METHODOLOGY.....	20

1.10.1 Research design.....	20
1.10.2 Selection of research sites and participants	22
1.10.3 Data generation and documentation.....	23
1.10.3.1 PRA-based workshops.....	24
1.10.3.2 Observation-as-context-of-interaction	24
1.10.3.3 Semi-structured individual interviews	25
1.10.3.4 Audio-visual data generation and documentation techniques	26
1.10.3.5 Field notes and reflective journal.....	27
1.10.4 Data analysis and interpretation	28
1.11 ETHICAL CONSIDERATIONS	29
1.12 RIGOUR OF THE STUDY	30
1.13 OUTLINE OF CHAPTERS.....	31
1.14 CONCLUSION.....	32

CHAPTER 2 - VISUAL IMPAIRMENT AND INCLUSIVE EDUCATION	34
2.1 INTRODUCTION	34
2.2 VISUAL IMPAIRMENT IN SOUTH AFRICA	34
2.2.1 Understanding visual impairment as a disability	34
2.2.2 Forms of visual impairment	36
2.2.3 Diagnosis of visual impairment.....	38
2.2.4 Prevalence and causes of visual impairment	40
2.2.5 Prominent needs of learners with visual impairment	43
2.2.5.1 School-related challenges and needs	43
2.2.5.2 Psycho-social challenges and needs	47
2.2.6 School provision for learners with visual impairment in South Africa	49
2.2.7 School-based support for learners with visual impairment	52
2.3 INCLUSIVE EDUCATION AS BACKDROP TO SUPPORTING LEARNERS WITH VISUAL IMPAIRMENT	56
2.3.1 Underlying principles and benefits of inclusive education.....	56
2.3.2 International trends in the field of inclusive education	58
2.3.3 Implementation of inclusive education in South Africa	61
2.3.3.1 Inclusive education and children’s rights.....	63
2.3.3.2 Progress with policy implementation	65
2.3.3.3 Teachers’ levels of readiness to implement an inclusive education policy in South Africa.....	66
2.3.3.4 Additional challenges in implementing inclusive education policy	69
2.4 CONCEPTUAL FRAMEWORK OF THE STUDY	711
2.4.1 Bio-ecological systems theory	71
2.4.2 Communities of practice theory	72
2.4.3 Social model of disability	744
2.4.4 Integration of existing theories in compiling a conceptual framework.....	74
2.5 CONCLUSION	77

CHAPTER 3 - CONTEMPLATING THE USE OF PARTICIPATORY REFLECTION AND ACTION FOR PROGRAMME DEVELOPMENT	799
3.1 INTRODUCTION	799
3.2 UNDERSTANDING PRA	799
3.2.1 Defining the concept of PRA	80
3.2.2 Development and traditional use of PRA as research approach	822
3.2.3 Underlying principles of PRA.....	833
3.2.4 Advantages of PRA.....	866
3.2.5 Challenges associated with PRA	877
3.2.6 Contexts in which PRA is often applied.....	899
3.3 PROGRAMME DEVELOPMENT	911
3.3.1 Background information on the postgraduate qualification in visual impairment studies	911
3.3.2 Requirements for tertiary programme development in South Africa	933
3.3.3 Possible approaches to programme development	944
3.3.4 Following a PRA approach when developing a postgraduate qualification .	955
3.4 CONCLUSION	988

CHAPTER 4 - RESEARCH PROCESS AND METHODOLOGY	999
4.1 INTRODUCTION	999
4.2 PARADIGMATIC PERSPECTIVES	999
4.2.1 Epistemological paradigm	999
4.2.2 Methodological approach	1022
4.3 RESEARCH PROCESS AND METHODOLOGICAL STRATEGIES	1044
4.3.1 Research design	1066
4.3.2 Selection of case and participants.....	1077
4.3.3 Data generation and documentation	1133
4.3.3.1 PRA-based workshops.....	1133
4.3.3.2 Observation-as-context-of-interaction	12121
4.3.3.3 Field notes and reflective journal.....	1233
4.3.3.4 Semi-structured individual interviews	1244
4.3.3.5 Visual and audio-visual data generation and documentation strategies	
1275	
4.3.4 Data analysis and interpretation	1288
4.4 ETHICAL CONSIDERATIONS	13030
4.4.1 Informed consent and voluntary participation.....	13030
4.4.2 Obtaining consent from participants who are blind.....	1311
4.4.3 Privacy, confidentiality and anonymity	1322
4.4.4 Protecting participants from harm	1333
4.4.5 Maintaining trust and avoiding deception	1333
4.5 MY ROLE AS RESEARCHER	1344
4.6 RIGOUR OF THE STUDY	1355
4.6.1 Credibility	1355
4.6.2 Dependability	1366
4.6.3 Confirmability	1366
4.6.4 Transferability.....	1377
4.6.5 Authenticity.....	1388
4.7 CONCLUSION.....	1399

CHAPTER 5 - RESULTS OF THE STUDY	14040
5.1 INTRODUCTION	14040
5.2 RESULTS OF THE STUDY	14040
5.2.1 Theme 1: Utilising PRA to access research partners' knowledge and expertise.....	1433
5.2.1.1 Sub-theme 1.1: Insight into teachers' understanding of inclusive education	144
44	
5.2.1.2 Sub-theme 1.2: Insight into research partners' understanding of the needs of learners with visual impairment	1477
5.2.1.3 Sub-theme 1.3: Insight into teachers' perceptions of their need to implement inclusive education with learners with visual impairment .	1511
5.2.1.4 Sub-theme 1.4: Relying on research partners' input for programme development.....	1577
5.2.2 Theme 2: Value for participants of being research partners in the PRA process.....	1599
5.2.2.1 Sub-theme 2.1: Value of relationships and collaboration with peers to reach a common goal.....	16060
5.2.2.2 Sub-theme 2.2: Value of having a voice and being heard.....	1633
5.2.2.3 Sub-theme 2.3: Learning from and with others	1666
5.2.3 Theme 3: Value for personal and professional development of the participants	1699
5.2.3.1 Sub-theme 3.1: Increased awareness of own competence and commitment.....	17070
5.2.3.2 Sub-theme 3.2: Realising the importance of training and further training	175
5	
5.2.3.3 Sub-theme 3.3: Feeling empowered in forming part of positive change	1777
5.2.4 Theme 4: Recommendations for future application of the PRA process .	18080
5.2.4.1 Sub-theme 4.1: Involving more participants from additional sectors in society	1811
5.2.4.2 Sub-theme 4.2: Allowing more time for the PRA process to unfold.....	1822
5.2.4.3 Sub-theme 4.3: Remaining aware of and accommodating the special needs of participants	1844
5.3 CONCLUSION.....	1866

CHAPTER 6 - FINDINGS OF THE STUDY	1877
6.1 INTRODUCTION	1877
6.2 VALUE OF PRA WHEN ACCESSING RESEARCH PARTNERS' KNOWLEDGE AND EXPERTISE	1877
6.2.1 Accessing participants' insight into inclusive education policy and supporting learners with visual impairment	1888
6.2.2 Relying on PRA principles to access participants' knowledge and insight	1922
6.3 VALUE OF PARTICIPANTS BEING REGARDED AS RESEARCH PARTNERS	195
5	
6.4 VALUE OF PRA FOR THE PROFESSIONAL AND PERSONAL DEVELOPMENT OF PARTICIPANTS.....	1999
6.4.1 Value for professional development	1999
6.4.2 Value for personal development.....	2022
6.5 APPLYING PRA FOR PROGRAMME DEVELOPMENT	2044
6.6 SILENCES IN THE DATA.....	2077
6.7 CONCLUSION.....	2111

CHAPTER 7 - CONCLUSIONS AND RECOMMENDATIONS	2122
7.1 INTRODUCTION	2122
7.2 OVERVIEW OF THE PREVIOUS CHAPTERS	2122
7.3 CONCLUSIONS	2133
7.3.1 Secondary research question 1: What are the needs of learners with visual impairment as perceived by their teachers and other people working with them?	2133
7.3.2 Secondary research question 2: What are the needs, expectations and existing expertise of teachers in implementing inclusive education policy in support of learners with visual impairment?.....	2166
7.3.3 Secondary research question 3: How can expert stakeholders in the field of visual impairment contribute to the content and development of a postgraduate qualification for teachers of learners with visual impairment, based on their experiences in the field?	2188
7.3.4 Secondary research question 4: How do teachers and expert stakeholders experience their involvement in developing a postgraduate qualification during PRA research?	2199
7.4 CONTRIBUTIONS OF THE STUDY	2211
7.4.1 Theoretical contribution	2211
7.4.2 Methodological contribution	2255
7.4.3 Profession-related contribution	2277
7.5 STRENGTHS AND LIMITATIONS OF THE STUDY	2288
7.6 RECOMMENDATIONS.....	23030
7.6.1 Recommendations for training	23030
7.6.2 Recommendations for practice	2311
7.6.3 Recommendations for future research	2322
7.7 CONCLUDING REMARKS	2333
LIST OF REFERENCES	2355
LIST OF APPENDICES	2744

LIST OF TABLES

Table 1.1: Summary of special needs schools and enrolled learners	2
Table 4.1: Selected cases and teacher participants	11010
Table 4.2: Expert stakeholder-participants	1111
Table 4.3: Overview of field visits and PRA-based workshops	1144
Table 4.4: Member-checking schedule	12020
Table 4.5: Participants involved in individual interviews	12525
Table 5.1: Phases of the project	14040
Table 5.2: Inclusion and exclusion criteria for Theme 1	1433
Table 5.3: Inclusion and exclusion criteria for Theme 2.....	16060
Table 5.4: Inclusion and exclusion criteria for Theme 3.....	17070
Table 5.5: Inclusion and exclusion criteria for Theme 4.....	18080

LIST OF FIGURES

Figure 1.1: Conceptual framework of the study	16
Figure 1.2: Research sites	22
Figure 4.1: Overview of the research process	1055
Figure 5.1: Themes and sub-themes of the study	1422
Figure 7.1: Framework for implementing PRA for programme or project development involving practitioners	2233

LIST OF PHOTOGRAPHS

Photograph 4.1: School 10, KZN	1099
Photograph 4.2: School 3, Limpopo	1099
Photograph 4.3: PRA-poster on inclusive education policy and its implementation	1166
Photograph 4.4: PRA-poster on required knowledge, skills and resources to implement inclusive education policy	1166
Photograph 4.5: PRA-poster on the needs of learners with visual impairment and how teachers may respond to such needs	1167
Photograph 4.6: PRA-poster on teachers' knowledge, skills and levels of readiness to teach and support learners with visual impairment.....	1177
Photograph 4.7: PRA-poster on suitable learning content for the proposed postgraduate qualification	1177
Photograph 4.8: PRA-based small group discussion.....	1177
Photograph 4.9: PRA-poster on the needs of learners with visual impairment...	1188
Photograph 4.10: PRA-poster on possible content for a qualification in visual impairment	1188
Photograph 4.11: PRA-poster on the value of the PRA-approach followed in the project	12020
Photograph 4.12: PRA-poster on the experiences of participants in being involved in a PRA-based project	12020
Photograph 4.13: PRA-poster for member-checking with stakeholder- participants.....	1211
Photograph 5.1: Teachers' understanding of inclusive education policy	1444
Photograph 5.2: Teachers' understanding of respect as component of inclusive education policy.....	1455
Photograph 5.3: Participants consulting White Paper 6 when discussing their understanding of inclusive education policy	1466
Photograph 5.4: Need for adapted learning material	1488
Photograph 5.5: Some needs of learners with visual impairment.....	1499
Photograph 5.6: Additional needs of learners with visual impairment	15050

Photograph 5.7: Need for specialised material and human resources of learners	15050
Photograph 5.8: Need for competent and specialised human resources	1511
Photograph 5.9: Teachers' needs when working with learners with visual impairment.....	152
2	
Photograph 5.10: Resources teachers require to engage with learners with visual impairment	1533
Photograph 5.11: Additional resources teachers require.....	1533
Photograph 5.12: Counters made by teachers for young learners with visual impairment	1566
Photograph 5.13: Counters made by teachers for older learners with visual impairment	1566
Photograph 5.14: Watches/clocks for learners with visual impairment	1566
Photograph 5.15: Participants sharing ideas with researchers on suitable content for the proposed qualification	1588
Photograph 5.16: Participants discussing ideas in small groups	1588
Photograph 5.17: Ideas by expert stakeholders on one of the modules of the postgraduate qualification	15959
Photograph 5.18: Teacher-participants engaged in a PRA discussion.....	1611
Photograph 5.19: Stakeholders sharing ideas with colleagues	1611
Photograph 5.20: Value of collaboration for teachers.....	1622
Photograph 5.21: Participants feeling included due to their participation in the PRA process.....	1644
Photograph 5.22: Stakeholders' appreciation of the proposed qualification	1655
Photograph 5.23: Benefit of different views being acknowledged	1666
Photograph 5.24: Value attached to the sharing of ideas and learning from one another	1677
Photograph 5.25: Strengthening team work as a result of participation.....	1688
Photograph 5.26: Participants learning from one another	1688
Photograph 5.27: Participants gaining knowledge from one another	1688
Photograph 5.28: Teachers being accommodative	1699
Photograph 5.29: Participants' need to improve their skills	1711
Photograph 5.30: Improved skills as a result of participation in the project	1722

Photograph 5.31: Teacher participants' improved skills and responsibilities as a result of their participation	1722
Photograph 5.32: School and teacher participants' responsibility for suitable infrastructure	1733
Photograph 5.33: Teacher participants' supportive responsibility.....	1733
Photograph 5.34: Participants being aware of their responsibility to support learners	1744
Photograph 5.35: Participants indicating commitment to further professional development.....	1766
Photograph 5.36: Participants indicating a willingness for further training.....	1766
Photograph 5.37: Guidelines for teacher training	1777
Photograph 5.38: Example of teacher training needs.....	1777
Photograph 5.39: Teacher participants' realisation of their positive contribution	1788
Photograph 5.40: Participants' feelings of being empowered.....	1799
Photograph 5.41: Teachers feeling encouraged to support positive change	18080
Photograph 5.42: Suggestions for additional participants.....	1811
Photograph 5.43: Participants' suggestion for sample selection	1822
Photograph 5.44: Recommendation to allow more time for such a project.....	1833
Photograph 5.45: Indication of the allocated time being too limited.....	1833
Photograph 5.46: Suggestions for accommodating participants' special needs .	1855
Photograph 5.47: Participants' request to have access to visual material	1855

CHAPTER 1

SETTING THE SCENE AND CONTEXTUALISING THE STUDY

1.1 INTRODUCTION AND CONTEXTUALISATION OF THE STUDY

In South Africa, the intellectual ability of children still seems to determine their access to quality education despite attempts to avoid this from happening (African Child Policy Forum, 2011). It is therefore inevitable that children facing specific challenges and having special needs are often not accommodated in the mainstream education system. Despite the availability of research on children with disabilities in South Africa, and the fact that many children with disabilities are not reported, the census report of 2011 revealed that out of the population of 43,3 million at the time, with 19 million children, approximately 496 000 children (0 to 19 years of age) were disabled (Statistics South Africa, 2011). This number includes all types of disabilities and of these, 32,1% were categorised as visually impaired (Statistics South Africa, 2011).

The same census report reveals that visual impairment statistics decrease as age escalates, with 97% disabled five- to nine-year old children being classified as visually impaired, yet only 51% of 85+ years old people are categorised as disabled (Statistics South Africa, 2011). At the time, the majority of all South Africans with visual impairment were the Indian population group (12,3%), followed by the white population group (10,3%) and then black Africans (9,2%). In terms of the various provinces in the country, the Free State province had the highest prevalence (13,8%), followed by the Northern Cape (11,5%), and then the North West province (11,3%) (Statistics South Africa, 2011). In terms of educational attainment, it is generally accepted that learners with disabilities such as visual impairment find it hard to attain education (Landsberg, Kruger & Nel, 2015).

Not many South African teachers are sufficiently trained to work with learners facing difficulties, despite the Snap Special Needs Education (SNE) survey (2013), indicating that about 10 252 South African teachers are employed at special needs schools. During the introduction of White Paper 6 on special needs education, *Building an*

*Inclusive Education and Training System*¹ (Department of Basic Education, 2001), 380 schools for learners with special needs existed countrywide with an enrolment of 64 603 learners, which could mean that a large number of children were either left out of the education system or wrongly placed in mainstream schools, with their needs probably not being adequately met (Department of Basic Education, 2001). According to the Department of Basic Education (2015b), the number of learners who experienced difficulties to see properly (including the range of visual impairments) yet did not attend special needs schools in 2015, accounted to 597 953 (Department of Basic Education, 2015b; McCarthy, 2015). Therefore increased access to public funded quality education for children with disabilities is necessary. Moreover, as it is the constitutional right of every child to access quality education and resources, it is important for children with disabilities to be enrolled in schools where they are stimulated educationally.

In Table 1.1, I provide an overview of the distribution of schools for special needs in South Africa, indicating the number of learners enrolled in these schools in the nine provinces of the country, as alluded to above.

Table 1.1: Summary of special needs schools and enrolled learners (Department of Basic Education, 2001)

PROVINCE	NUMBER OF SPECIAL NEEDS SCHOOLS (ALL SENSORY AND INTELLECTUAL IMPAIRMENTS)	NUMBER OF LEARNERS ENROLLED IN SCHOOLS FOR SPECIAL NEEDS
Eastern Cape	41	6483
Free State	19	3127
Gauteng	96	25451
KwaZulu Natal	58	7631
Limpopo	19	4250
Mpumalanga	15	2692
North West	42	4364
Northern Cape	8	1392

¹ A policy framework developed by the South African Department of Education to address the country's state of special needs and services in education and training, thereby providing guidelines for the implementation of inclusive education.

Western Cape	82	9213
Total	380	64 603

According to the National Education Department's Education Management Information System (EMIS), disparities exist in providing these learners with quality education due to the lack of sufficient human resources and adequate training of teachers (Department of Basic Education, 2001). The introduction of the inclusive education policy brought with it the notion that many learners who experience learning difficulties and are in need of educational support are in theory supposed to receive such support, yet may not have access to it. Even though inclusion suggests that learners who do not experience severe learning difficulties can be supported in mainstream schools, now called inclusive or full service schools in South Africa, teachers more often than not lack the necessary knowledge and skills to support these learners (Department of Basic Education, 2015a).

As a result of White Paper 6 on special needs education (Department of Basic Education, 2001) several mainstream schools have been transformed to full service schools (FSS) since 2001, with the aim of admitting learners with various learning difficulties to these schools, and including them in the education system. A full service school is defined as a school that can provide quality education to all learners and that has the capacity to accommodate a full range of "learning needs in an equitable manner" (Department of Basic Education, 2010, p. 7). In these schools, the individual needs of learners can be addressed and the curriculum aided to ensure that the necessary support is provided to both learners and teachers (Department of Basic Education, 2010). However, the question remains as to whether or not current full service schools are indeed able to provide the support required, and whether or not Education White Paper 6 on special needs education (Department of Basic Education, 2001) has been implemented effectively.

As much as full service schools are trusted to provide the required support to learners, it is also acknowledged that some learners with special needs require more support than others (Landsberg, Krüger & Nel, 2005). As all learners do not learn in the same manner and/or pace, it is important for teachers to identify, nurture and capitalise on different learning styles to support them efficiently (Landsberg et al., 2005). At the

same time, teachers may identify barriers to learning if they are familiar with relevant identification and assessment procedures. In the current South African scenario, many learners still go unidentified due to, among other reasons, teachers not being sufficiently informed on how to identify and assess strengths and barriers at an early stage (Berry, 2008). Learners may, as a result, continue with their current schooling, while the barriers to learning intensify.

Accurate identification and assessment in the field of visual impairment are important as the information obtained during such assessment processes can contribute significantly to the learning support that is subsequently planned and provided to learners (Landsberg et al., 2005). However, as stated, many practising teachers are not sufficiently trained to assess learning difficulties such as visual impairment. In addition to this, limited available space in schools for learners who face learning challenges remains a challenge in South Africa (Berry, 2008; Department of Basic Education, 2001; Habulezi & Phasha, 2012; Donohue & Bornman, 2014; Ngwena & Pretorius, 2012).

Against this background, the South African Department of Higher Education and Training (DHET) received funding from the European Union (EU) to promote the implementation of the inclusive education policy in South Africa and to prepare teachers for implementing it. As a result, the University of Pretoria applied for and obtained EU/DHET funding to support the implementation of the inclusive education policy in the field of visual impairment, focusing on teachers' levels of competence. The current study forms part of this broad institutional funded project that, among other things, includes the development of a postgraduate qualification that may equip teachers of learners with visual impairment with relevant knowledge, skills and expertise.

1.2 OVERVIEW OF THE BROADER EU/DHET-FUNDED RESEARCH PROJECT

The broader EU/DHET-funded project commenced in November 2016 and involves five phases, with the current study forming part of Phases 2, 3 and 4, as explained further on in this section. In addition to the project focusing on the development of an Advanced Diploma, Open Educational Resource (OER) material is currently being developed and a Centre for Visual Impairment Studies is being established at the University of Pretoria.

The first phase of the project (2016) entailed the initial conceptualisation of an Advanced Diploma in Visual Impairment Studies by academic staff members involved in the project, and applying for related approval from the relevant institutional and external bodies. As the development of the final module content was based on research with teachers and stakeholders in the field, ethical clearance was obtained from the University of Pretoria and the relevant Departments of Education, as part of Phase 1 of the project.

The second phase of the project (2017 to 2018) involved data generation with teachers in both full service and special needs schools in five of the nine provinces of South Africa, as well as with expert stakeholders working in the field of visual impairment. During this phase, research was conducted on the needs, expectations and ideas of the participating teachers and stakeholders, which served as background for developing draft module outlines for the Advanced Diploma qualification (Phase 3, 2018). Next, member-checking was conducted with the initially involved teachers and stakeholders as Phase 4 of the project to confirm the proposed draft module content before commencing with module development.

During the fourth phase of the project (2018), the draft programme outline and proposed module content were presented to the participants, requesting their input to revise the proposed module content where needed, based on the feedback and input received. The fifth and final phase of the project that is currently underway entails final approval of the programme and modules on national level; development and finalisation of the modules as well as the associated OER learning material; implementation of the programme, and continued monitoring and evaluation for the purpose of quality assurance and revision when required.

1.3 RATIONALE FOR UNDERTAKING THE STUDY

As stated, the current study forms part of a broad EU/DHET project with the overarching aim of supporting teachers through the development and offering of a postgraduate qualification, to implement the inclusive education policy more effectively and address all learners' needs in South Africa. The qualification is specifically focused on learners who experience learning difficulties as a result of visual impairment. Due to the fact that many teachers in inclusive and specialised schools are inadequately

trained to work with learners who experience learning difficulties (Berry, 2008), the qualification that is developed as part of the EU/DHET project will focus on both practising and future teachers in terms of skills acquisition to teach, assess and support learners who face difficulties effectively. As part of the broader funded project, this study specifically focuses on the process of developing the Advanced Diploma in Visual Impairment Studies. This qualification is rooted in White Paper 6 on special needs education (Department of Basic Education, 2001) and will target current as well as future teachers. Effective implementation of the inclusive education policy by teachers implies the possibility of schools becoming better resources in themselves, not having to refer all learners who experience barriers to learning to specialised institutions.

It seems evident that inclusive education is well developed in theory, yet marked by limitations in terms of its current implementation in South Africa (Kalyanpur, 2011). It follows that practising teachers and students currently enrolled for education qualifications may be trained in the theory of inclusive education but not necessarily gain sufficient skills or know how to apply this theory in the classroom. In this regard, Ainscow (2002) confirms that, even though education students are generally provided with a broad foundation on inclusive education policy, they seldom receive specialised training on how to deal with specific barriers to learning, such as visual or auditory impairment. Teachers who have been in the profession for many years may lack sufficient knowledge and skills on both the theory and practical application of inclusive education (Bornman & Rose, 2010), as this policy did not form part of student training programmes offered at national institutions prior to the publication of White Paper 6 on special needs education in 2001 (Department of Basic Education, 2001). Although training workshops have been conducted by the Department of Education since the release of White Paper 6 on special needs education in 2001 (Department of Basic Education, 2001), the implementation of the inclusive education policy still poses a challenge to many teachers (Kalyanpur, 2011).

As it is important for all learners to be able to compete at an international level with the skills they possess, the implementation of the inclusive education policy remains an international priority. In 1994, 92 countries of which South Africa was one, adopted the Salamanca Statement, thereby accepting the principles of inclusive education (UNESCO, 1994). The Salamanca Statement was supported by the Convention on

the Rights of Persons with Disabilities (USAID, 2008) that entails the recognition of the rights of people with disabilities for the provision of equal opportunities for lifelong learning for all in an inclusive education system at all levels, without any discrimination. In addition, the world education forum in Dakar, Senegal, planned to achieve Education for All (EFA) by 2015 by providing equal opportunities in the education system to previously marginalised groups, such as learners with disabilities (Kalyanpur, 2011).

During my employment as a support teacher in 2015 in a full service school in the Free State province (South Africa) I realised the importance and significance of teachers having sufficient knowledge and skills on inclusive education implementation, both in terms of theory and practice. I came to the realisation that learners with special needs, such as those with visual impairment, are not always sufficiently supported due to teachers not knowing how to teach and support them. In these cases, mainstream teachers may seek a solution by referring learners to schools for special needs (Berry, 2008). However, as there is a shortage of space and often long waiting lists at these schools, learners with special needs, such as those with visual impairment, may remain in mainstream schools and as a result not receive the much needed support they require. If teachers can acquire the necessary knowledge and skills to teach and support learners with visual impairment effectively in both mainstream and specialised settings, such as through a qualification as the one that is currently being developed, they may become better equipped, resulting in learners with special needs being better attended to as a result.

This argument highlights the importance of developing the mentioned qualification as none of such a nature currently exists in South Africa. Due to limited literature being available in the field of programme development regarding visual impairment qualifications in South Africa, it thus seemed important to involve people who work in the field of visual impairment with learners on a daily basis in conceptualising module content for the qualification. Through the application of Participatory Reflection and Action (PRA), teachers and expert stakeholders were invited to partake in the process of developing a programme outline and identifying possible module content for the qualification in Visual Impairment Studies. It is significant to note that PRA is an emerging research approach that has been applied in various fields in recent years, yet with limited evidence of its potential use when developing a qualification. As this

approach implied the possibility of eliciting rich and informative responses from participants when involving them as co-researchers and partners in such a programme development process, I set out to explore the utilisation of PRA and its potential value – in essence, the implied potential of developing an outline and subsequently a qualification based on the experiences and expertise of people who are experts in the selected field of teaching and who experience related challenges and needs on ground level on a daily basis.

1.4 PURPOSE AND AIMS OF THE STUDY

The purpose of my study was to explore, describe and explain the process and outcome of the development of a postgraduate qualification – Advanced Diploma in Visual Impairment Studies – when following a PRA approach. As such, the participants were taken as experts in the field of teaching and supporting learners with visual impairment, and therefore involved in a participatory process of identifying suitable content for the said qualification, which focuses on the implementation of inclusive education policy in all schools and on supporting such learners.

As a result, the final module content that is currently being developed is based on discussions during PRA-based workshops with teachers and stakeholders in the field of visual impairment. Accordingly, one of the main purposes of the current study was to connect and collaborate with stakeholders and experts in the field of visual impairment, with the second purpose of accessing their knowledge and the best possible expertise in the development of the qualification. The outcome of this involvement of teachers and expert stakeholders may inform the use of PRA during programme development at higher education institutions in other fields of interest in future. Partnerships between University of Pretoria researchers, teachers, and people who are outside the school context furthermore implied dynamic discussions and the potential practical implementation of inclusive education policy.

In order to reach the purpose of my study, I aimed to do the following:

- ❖ Explore and describe the needs of learners with visual impairment, as perceived by teachers and other people working with them.
- ❖ Explore the needs, expectations and existing expertise of teachers for implementing inclusive education policy when working with learners with visual impairment.

- ❖ Explore, describe and explain the contribution of expert stakeholders in developing a postgraduate qualification in the field of visual impairment.
- ❖ Explore, describe and explain how participants experienced their involvement in programme development through implementation of a PRA process.

By attending to these aims, I set out to obtain findings that may contribute to the existing knowledge base on visual impairment as well as the implementation of White Paper 6 on special needs education (Department of Basic Education, 2001), more specifically in terms of teachers' perceptions on how this policy may be implemented to support learners with visual impairment. With regard to the existing knowledge base on visual impairment, my study may add insight in terms of the needs of these learners when being taught, how learners with visual impairment can be accommodated in full service schools, and which knowledge and skills should better equip teachers who work with learners with visual impairment.

Finally, even though theory on inclusive education forms part of the curriculum of current undergraduate teacher training programmes, no specific qualification in visual impairment is offered in South Africa yet. As such, my study and the qualification that is being developed should have practical value. Furthermore, the use of PRA for programme development can serve as an example for the development of future qualifications.

1.5 RESEARCH QUESTIONS

Based on the discussions in the preceding sections, I formulated the following primary research question that guided me in undertaking this study: *How can insight into the development of a postgraduate qualification in visual impairment studies inform the use of participatory methodology during programme development?*

To address the primary research question, I attended to the following secondary questions:

- ❖ What are the needs of learners with visual impairment as perceived by their teachers and other people working with them?
- ❖ What are the needs, expectations and existing expertise of teachers in implementing inclusive education policy in support of learners with visual impairment?

- ❖ How can expert stakeholders in the field of visual impairment contribute to the content and development of a postgraduate qualification for teachers of learners with visual impairment, based on their experiences in the field?
- ❖ How do teachers and expert stakeholders experience their involvement in developing a postgraduate qualification during PRA research?

1.6 WORKING ASSUMPTIONS

Based on the initial literature review I completed, the paradigmatic stances I took and the methodology I employed, I conducted this study against the background of the following assumptions:

- ❖ I assumed that teachers in South Africa are informed about inclusive education policy and that the implementation of the policy will be beneficial to the learners they teach.
- ❖ I assumed that teachers in South Africa may have received some training on inclusive education and related topics such as the Screening, Identification, Assessment and Support (SIAS) process as well as curriculum differentiation.
- ❖ I assumed that some schools may struggle to implement the principles of inclusive education due to limited infrastructure and resources; however, I assumed that some collaboration would exist between full service and special needs schools in such cases, as the latter are intended to be resource centres.
- ❖ I assumed that teachers will possess the necessary knowledge to inform the content of a postgraduate qualification in Visual Impairment Studies.
- ❖ I assumed that the use of participatory methodology (specifically PRA) would yield insight into the needs and expectations of the participants, and suitable content for a postgraduate qualification in Visual Impairment Studies.
- ❖ I assumed that communities of practice can contribute to the reciprocal engagements of participants when involved in programme development.
- ❖ Finally, I assumed that expert stakeholders outside the school context would have similar aspirations about developing a postgraduate qualification that may equip teachers and in turn benefit learners with visual impairment.

1.7 CONCEPT CLARIFICATION

In this section I clarify the key concepts underlying the current study.

1.7.1 Participatory Reflection and Action (PRA)

PRA is defined as a research approach that seeks knowledge for social action; it is said to be concerned with human-related purposes (Ozanne & Saatcioglu, 2008). Researchers in the field of PRA assume that society is relational, contextual and co-constructed in the sense that things that occurred in the past have an influence on the present, and that individuals do not exist in isolation but are rather related to one another and their various environments (Chambers, 2012; Ozanne & Saatcioglu, 2008). In PRA, the focus often falls on those whose voices are not generally heard, and on those with minimum power to implement change. With the inclusion of two important elements, that of change and that of action, PRA aims to generate and gain knowledge and action for a specific problem and to empower people to engage in knowledge construction and the use of their existing knowledge (Walter, 2009). The ultimate meaning of PRA is nested in the possibility of empowering those who are involved (Chambers & Guijt, 1995).

For the purpose of this study, the PRA-based activities that were included relied on a series of reflections and actions by the participants – co-researchers – and the research team to solve the problem of identifying suitable module content for a postgraduate qualification in teaching the visually impaired. The aim was not to approach participants as experts with the intention of observing their situations and proposing solutions to a challenge they faced, but rather to embrace PRA's nature of collaboration and participation (Maree, 2007) in seeking ways of addressing a problem or finding an answer to the question on suitable module content for an advanced diploma in a specialised field. This was done through classroom observation, as well as teachers and stakeholders' engagement and involvement in the conceptualisation of the programme and respective modules. However, the current study implied the potential of empowering the participants and ensuring that they remain resources in the field of visual impairment based on their participation, and by valuing their contributions (Chambers, 2008a).

1.7.2 Development of a postgraduate qualification

A postgraduate qualification is a qualification that can be enrolled for after completing an undergraduate degree, according to the South African Qualifications Authority

(SAQA, 2010). Although postgraduate qualifications are typically completed in a shorter period of time than undergraduate programmes, the aim of such programmes is to assist candidates in advancing certain specialised career paths (Badat, 2010).

In the current study, the postgraduate qualification referred to entails an Advanced Diploma in the specialised field of visual impairment (AD: VIS), that is being developed on the National Qualification Framework (NQF) level 7. A NQF level 7 qualification requires of applicants to have obtained knowledge and understanding of certain key concepts and theories before enrolling for the programme (SAQA, 2010). As such, the entry requirements for the AD: VIS should be a B.Ed. (teaching) or equivalent degree. In developing the qualification, guidelines provided by the Council of Higher Education (CHE) as well as the South African Qualification Authority (SAQA) have and will direct the final development process.

1.7.3 Visual impairment

Visual impairment refers to a significant loss of vision, either in one or both eyes. According to the Persons with Disability Act (1995), visual impairment falls under two categories. Firstly, the blindness category that implies total loss of sight, or “visual acuity not exceeding 6/60 or 20/200 in the better eye even with correction lenses or limitation of the field of vision subtending an angle of 20 degrees or worse” (Persons with Disability Act, 1995, p. 247). Secondly, visual impairment is defined in terms of low vision, which implies a condition where, even after correction, visual functioning is still not fully recovered (Keeffe, 1996; Persons with Disability Act, 1995).

For the purpose of the current study, visual impairment refers both to learners in the school system who have low vision and those who are blind. In this way, visual impairment is viewed as the reduction of sight, ranging from low to severe, which disadvantages learners to participate fully in or benefit from an educational setting. Despite efforts of correction through the use of e.g. spectacles, contact lenses or surgery, learners with visual impairment are seen to experience persistent partial and/or complete loss of sight (Mosca, 2015).

1.7.4 Inclusive education

According to White Paper 6 on special needs education, *Building an Inclusive Education and Training System* (Department of Basic Education, 2001), inclusive education entails the acknowledgement that every child is able to learn although certain learners may need more support than others (Department of Basic Education, 2001). Inclusive education is thus about the acceptance and respect of all learners even though differences exist in the manner in which learners learn. Furthermore, inclusive education implies the allowance of the education system, constructions, attitudes, practices and curricula to meet all learners' needs (Ntombela, 2011). At its core, inclusive education refers to the non-discrimination against learners regardless of their "age, gender, ethnicity, language, class, disability or HIV status" (Department of Basic Education, 2001, p. 16). The policy thus advocates the admission of all learners to all schools regardless of any differences and barriers. It promotes a sense of belonging among learners as mutual respect is experienced, and acknowledges the ability of all learners to learn.

Inclusive education acknowledges that learning does not only take place in the school context but also in various other contexts, such as the learners' community and home contexts. Regardless of the context, inclusive education is about ensuring that learners' participation in education is maximised and that they are empowered to develop and capitalise on their strengths and talents when learning (Department of Basic Education, 2001, Mohangi & Berg, 2015).

Inclusive education therefore aims to recognise the differences that learners enter the school system with, and respect these while capitalising on similarities (Department of Basic Education, 2001). Many learners in South Africa come from poverty-stricken backgrounds. Learners are often affected by various learning-related challenges without the possibility of receiving support (Donohue & Bornman, 2014). In this regard, inclusive education allows for the possibility of overcoming barriers that may prevent the fulfilment of learning needs. Furthermore, the policy does not regard learners as passive recipients of knowledge but as active participants in their own learning, respecting one another while encouraging diverse cultural participation. As opposed to the medical approach, inclusive education views the learner holistically and involves all relevant parties in a learner's development (Rebell & Wolff, 2006).

1.8 CONCEPTUAL FRAMEWORK

I integrated elements and constructs of the bio-ecological systems theory (Bronfenbrenner, 1990)², communities of practice theory (Kerno, 2008), and the social model of disability (Anastasiou & Kauffman, 2013) in compiling a conceptual framework. In this section I briefly introduce my conceptual framework that I explain in more detail in Chapter 2.

Bronfenbrenner's *Bio-ecological systems theory* (Bronfenbrenner, 1990) implies a reciprocal influence between learners (individuals) and systems, in a direct or indirect manner (Berk, 2000). Even though the theory embraces four key components, namely Person, Process, Context and Time (PPCT), my study primarily focuses on the context and process components. Context entails the influences in a child's environment and the interactions that take place between the micro-, meso-, exo- and macrosystems (Krishnan, 2010), while process refers to proximal processes and involves particular forms of interactions that exist between an individual and the context (Bronfenbrenner & Morris, 1998). In applying the effect of environmental influences on human functioning to my study, the experiences, needs and strengths of the participants were taken as directing them to focus on connections and interactions that may be beneficial (Boon, Cottrell, Stevenson & Miller, 2012; Swick & Williams, 2006). Even though I faced the potential challenge of misunderstanding some of the interactions of the systems as I am not a permanent resident of the context (Folke, 2006), I viewed the participants as experts of their situation. To this end, I did not impose any knowledge but allowed participants to inform me about their views and experiences in working with learners with visual impairment (Capra, 2002).

Next, according to *Communities of practice theory* (Kerno, 2008), relationships that are reciprocal in nature are core to engagements, with excellent practices potentially being shared through common actions (Wenger, McDermott & Snyder, 2002). A flow of information can occur for the benefit of members in a community of practice and eventually results in a sense of belonging (Wenger, 2009). Communities of practice

² I acknowledge that this is a seminal source yet opted to rely on the original source in order to understand the bio-ecological systems theory as initially conceptualised.

thus imply the acquisition of knowledge in a certain context from a so-called “knower” (Wenger, 2009, p. 2). As such, I was able to acquire the status of knower based on the information I received from the participants, which in turn may have benefited them in acquiring additional knowledge and specialised skills in the field of visual impairment based on the discussions they participated in.

The current study could therefore benefit from the idea that communities of practice members in the field of visual impairment may expand and exchange knowledge and ideas as part of research activities (Lave & Wenger, 1991). More specifically, teachers and other stakeholders who participated in the PRA-based activities were able to share ideas and experiences on teaching learners with visual impairment in their respective contexts. This took place in groups where the participants seemingly experienced a sense of belonging and coherence, based on their belonging to the specific community of practice.

I interpreted all discussions and research activities against the background of the *Social model of disability* (Anastasiou & Kauffman, 2013) that advocates social change and the support of learners – and people – with disability (Shakespeare & Watson, 2001). Accordingly, society, and by implication the school context, is regarded as important for the growth and development of people who are disabled in the sense of maintaining support and positive attitudes of others towards people with disabilities (Shakespeare & Watson, 2001). The social model of disability detaches disability from a medical diagnosis and shifts the focus to the environment (French, 1993), by implication the school. In this study the focus accordingly fell on the inclusion of learners with visual impairment in the school context. In Figure 1.1 I capture the way in which I integrated these three theories in compiling a conceptual framework.

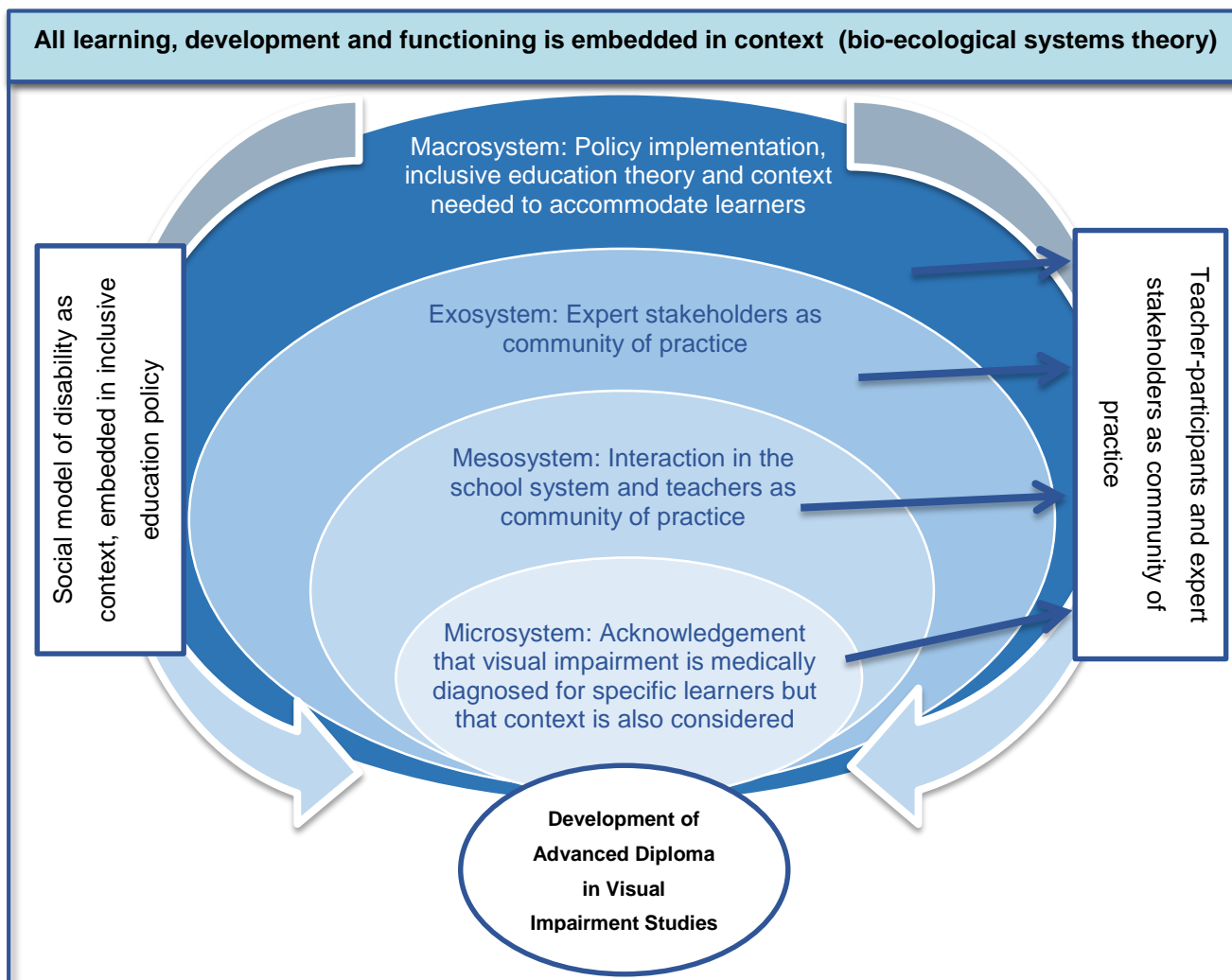


Figure 1.1: Conceptual framework of the study

In integrating the three theories, I relied on selected concepts and principles of each. Utilising Bronfenbrenner's context component (Boon et al., 2012), communities of practice theory as well as the social model of disability with inclusive education emanating from it, I thus viewed various systems as being involved and influential in any attempts to collaborate for the benefit of learners or people who are disabled. In my study I regarded the participating teachers and expert stakeholders as systems or communities in themselves that have to abide by some laws – the macrosystem – to teach and attend to learners with visual impairment. As such, the current study aimed to engage participants – a community of practice as exosystem – in discussions on the challenges that learners with visual impairment may face. As these challenges are especially faced in a school setting – the mesosystem – the focus fell on brainstorming possible solutions that could feed into the development of a postgraduate qualification. The ultimate aim is to equip practising and prospective teachers with skills to teach learners with visual impairment.

Representatives of various systems therefore participated in the course of my study, such as teachers and indirectly learners who were observed during school visits, and stakeholders who were not in the school environment but worked in the field of visual impairment. The selected theories thus allowed me as researcher to enter, understand and become involved in the interrelationships of different systems in an attempt to answer the research questions (Darling, 2007).

As the three selected theories all embrace shared knowledge, the shared experiences did not end with individuals but rather formed part of a repertoire of generated knowledge. In this manner, based on the interaction of systems that took place as described by the context component of the bio-ecological systems theory, participants were able to exchange practices, indicate needs, and collaboratively identify potential solutions, which in turn informed the outline of the module content for the postgraduate qualification developed. In this way, I could rely on the link between the context component of the bio-ecological systems theory and learning being perceived as a social act by communities of practice theory. As a researcher involved in the development of a qualification in visual impairment studies, this link required of me to take into account that participants were social beings who gave meaning to their contextual experiences and that I was exposed to these experiences in the context that they occurred in, regarding the participants as experts throughout the research process.

1.9 PARADIGMATIC PERSPECTIVES

In this section I introduce the selected epistemological and methodological stances. I explain these choices in more depth in Chapter 4.

1.9.1 Epistemological stance

I relied on interpretivism that supposes that no objective reality exists, and that individuals perceive and interpret the reality of an event in different ways (Carcary, 2009; Mack, 2010). Interpretivism suggests that a researcher cannot merely observe from the outside but needs to be part of a study and experience with participants (Carcary, 2009; Mack, 2010). In this way, individuals as well as communities may act on what seems real to them through experiences and interactions with one another

while they make meaning. It follows that interpretivism is about how participants make sense of the situations they find themselves in (Reeves & Hedberg, 2003).

My reason for choosing interpretivism as epistemology relates to this paradigm embracing participants' own construction of meaning of their reality and their making sense of their situations (Capra, 2002). As interpretivist researcher, I did not impose my knowledge of the phenomenon on participants but viewed them as the experts of their own environments, contexts and the topic under study (Mack, 2010; Taber, 2011). More specifically, for the purpose of this study, I aimed to gain insight into the participants' experiences as teachers of learners with visual impairment or as expert stakeholders in the field of visual impairment, and of them as implementers of inclusive education policy (Deetz, 1996; Henning, Van Rensburg & Smit, 2004; Mack, 2010).

Interpretivism implies certain advantages as well as some challenges. One of the advantages entails that this choice allowed me to enter into the lifeworld of participants and gain insight into how they construct meaning to their experiences and the challenges they face (Taber, 2011). As interpretivism implies collaboration between a researcher and participants, I relied on joint data generation, however not only involving researchers and participants as groups, but also among participants with smaller groups working together for data generation purposes (Savery & Duffy, 2001).

A potential limitation implied by interpretivism relates to the findings of interpretivist studies not being generalisable (Mack, 2010). Even though I attempted to include a representative sample, teachers have different experiences in terms of how they teach and support learners with visual impairment when implementing the principles of inclusive education. In realising that any context, although it may seem similar to others, is unique and may present the same phenomenon in a different way, and against the background of the specific focus of my study and the selected research design, I did not seek generalisable findings. Another potential limitation often mentioned relates to the fact that interpretivism allows for leverage and can thus cause a so-called loose structure (Savery & Duffy, 2001). Even though some participants as a result may have been somewhat reluctant, others took the lead in discussions. To this end, roles were clearly defined at the onset of the study, and collaboration and active participation encouraged throughout. Research team members focused on inviting contributions from participants who seemed quiet during discussions.

1.9.2 Methodological approach

I followed a participatory approach, more specifically a PRA approach, as PRA can assist researchers to better understand the circumstances of the people they are conducting research on (Chambers, 2012). Based on the nature of PRA research, the participants were able to generate qualitative data, thereby integrating manifold realities containing meaning that has been socially constructed in unique ways (Flick, 2014). Interpretivism is closely aligned with PRA as the participants' meanings and ideas generated in groups were taken as core and interpretations could be made in terms of the participants' contributions.

In PRA research, various participatory data generation techniques can be used, with the researcher working alongside the participants in generating ideas, which are then shared in a group setting (Rumsey, Thiessen, Buchan & Daly, 2016). In this way, the participants were able to contribute to the outline of the module content that was developed based on the generated data. PRA embraces a culture of sharing, be it knowledge, ideas, experiences or information (Chambers & Guijt, 1995). As such, in this study the participants were taken as the experts who informed the data generation process, as they were regarded as knowing the topic under study best (Chambers, 2008). In reflecting on their experiences, and in collaboration with their peers, the participants were also moved into implementing some of the ideas that were shared on inclusive education and visual impairment during the PRA discussions, thereby moving into action.

PRA research provided the advantage of my comprehending human experiences and ideas in a holistic manner (Denzin & Lincoln, 2002; Makoelle, 2014). By generating qualitative data, I was able to access "thick descriptions" provided by the participants (Rahman, 2017, p. 103), which added to my understanding of how they viewed the requirements for a qualification aimed at teachers who work with learners with visual impairment. Elements of both data saturation and flexibility that apply to both PRA research and qualitative studies were beneficial in the sense that the other members of the research team and I could go back to the field with the aim of generating additional data if the need were to arise (Chambers, 2008). As already alluded to, we had the flexibility to utilise multiple concrete and visual data generation techniques

(Maxwell, 2012; Ozanne & Saatcioglu, 2008) that could add to our understanding of the phenomenon being explored.

However, PRA research also has some limitations. By focusing on experiences, the data generated during such studies may be regarded as superficial and at times brief. I attempted to avoid this limitation by specifically stating the purpose of the study to the participants, by clarifying uncertainties that arose in the course of the study and by encouraging in-depth contributions (Daymon & Holloway, 2002). As with qualitative studies, the possibility always exists that participants may modify their contributions and behaviour in an attempt to impress others or provide expected contributions (Chambers & Guijt, 1995). In this regard, participants were urged to remain as truthful and typical as possible, and the importance of the natural setting was emphasised throughout.

1.10 RESEARCH METHODOLOGY

In this section I introduce the research design, selection of participants, data generation and documentation, as well as data analysis and interpretation procedures I relied on. More detailed explanations of these aspects are included in Chapter 4.

1.10.1 Research design

I utilised an instrumental case study design in striving to gain insight into the phenomenon being studied (Stake, 2010). Generated data thus informed and facilitated comprehension in terms of the development of an outline for the Advanced Diploma in Visual Impairment Studies by following a participatory approach (Stake 2005; Zainal, 2007).

Case study research is defined as research that allows for the focusing of attention, and the studying and understanding of a selected issue and/or broader phenomenon (Gerring, 2004; Maree, 2007). According to Gerring (2004, p. 341), a case study design implies the “in-depth study of a single unit where the researcher's aim is to elucidate features of a larger class of similar phenomena”. This design has proven to work well when a researcher does not want to rely on secondary data but wants to obtain first-hand experience about a topic and participants' experiences and views (Yin, 2004). My reason for selecting a case study design was based on the focus of

my study, entailing the process of developing an outline for a postgraduate qualification in a specialised focus area in collaboration with experts in the field. I furthermore explored contextual conditions that may have an impact on the implementation of inclusive education, due to the possibility of these being relevant and informative to the phenomenon under study (Baxter & Jack, 2008).

The PRA approach I followed allowed for participation and partnerships, which in turn implied that I viewed the participants as knowledgeable about their contexts and as being in the position to generate data on the circumstances surrounding the needs and experiences of teachers when implementing inclusive education policy, or when teaching learners with visual impairment; and later on in the study, on their experiences of being co-developers of an outline of module content for a postgraduate qualification (Walter, 2009). PRA resonates with both interpretivism and the case study design I selected, as it encouraged participants to take the lead during data generation and go into as much depth as possible, for me to be able to understand the phenomenon I explored.

A benefit of case study design relates to the fact that generated data can be examined in an original and relevant setting, in this case the setting where teachers experience the teaching of learners, some of whom are visually impaired (Zainal, 2007). To this end, facilitation of positive change was possible while in the research field (Walter, 2009; Yin, 2004). A potential challenge, however, relates to the lack of generalisability of the findings (Yin, 2004). As already stated, it was not my intention to generalise the findings I obtained due to the uniqueness of the study and the nature of the phenomenon under study, and based on my choice of interpretivism and a PRA approach, relying on qualitative data (Zainal, 2007). Another possible drawback of case study research relates to the possibility of researchers rushing the process due to time limitations. I did not experience this limitation, as sufficient preparations were made in terms of time and processes, and prolonged time was spent in the field, up to the point of data saturation. Although there may have been specific time frames attached to the broader project, these were planned for accordingly and therefore the generated PRA data was not affected by this possible drawback. The research team considered participants as experts and expected them to take ownership of the process and guide the time spent on data generation activities (Chambers, 2008).

1.10.2 Selection of research sites and participants

The current study as part of the broader research project entailed research in 17 schools in South Africa, involving 255 teachers of full service and special needs schools as well as 50 expert stakeholders who worked in the field of visual impairment. All teachers at the schools that were identified as research sites were invited to participate; thus no potential contributions were excluded. The 17 schools are situated in five of the nine provinces of South Africa, namely the Eastern Cape province, the Free State, Gauteng, KwaZulu Natal and Limpopo. Figure 1.2 indicates the location of the five provinces and the selected 17 schools.

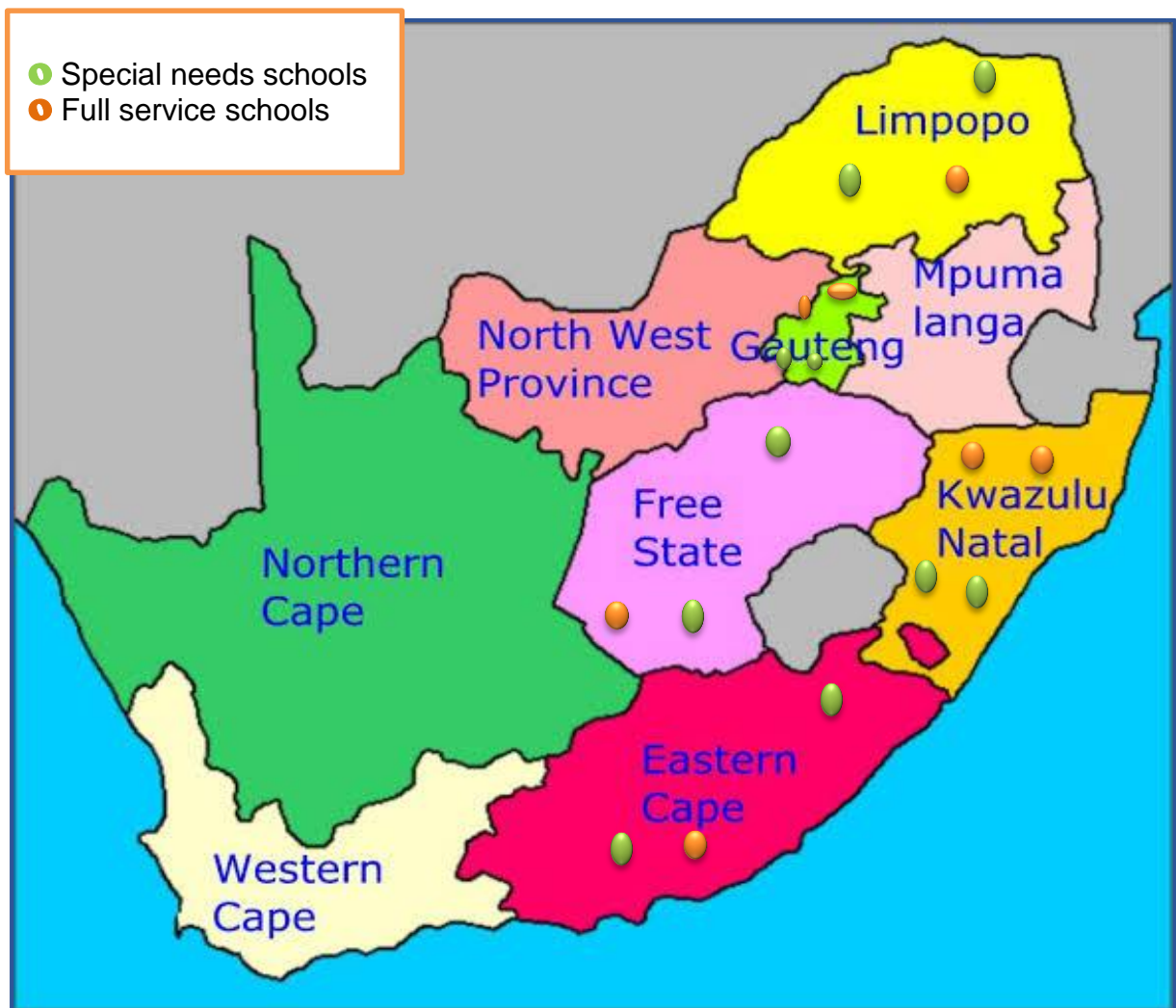


Figure 1.2: Research sites

For selection of the research sites, a nationwide invitation was cast to the provincial Departments of Education, inviting participation of the schools in the respective

provinces, and requesting permission to proceed with arrangements. The first three provinces that responded and granted permission to proceed were then visited for data generation in schools. Based on the view that additional data could benefit the study, permission to conduct research was then obtained from two additional provinces. As such, provinces were sampled on a random yet also voluntary basis (Maree, 2007). Specific schools in the respective provinces were then purposefully identified from the various provinces. Similarly, all teacher-participants were selected purposefully.

Purposive sampling implies the advantage of participants being informed and able to provide data that may answer the research questions (Given, 2008). As such, I involved teacher-participants who teach or may in future teach learners with visual impairment in both full service and special needs schools. In addition, expert stakeholders who were viewed as knowledgeable in the field were invited to participate. In this way, participants in the study were in the position to provide information that was relevant to address the research questions.

For the selection of the expert stakeholders, I relied on snowball sampling by selecting a limited number of participants at first and then following their recommendations of others whose contributions could be beneficial to the study (Patton, 1990; Ratner, 2002). The stakeholders who were initially identified thus served as informants who provided detail about other people in the field of visual impairment (Seale, Gobo, Gubrium & Silverman, 2011). Their recommendations led to the sample size of expert-stakeholders increasing, and in turn strengthening the generated data. I include more information on the selected research sites (schools) and participants in Chapter 4.

1.10.3 Data generation and documentation

In this section I briefly introduce the multiple strategies I relied on for data generation and documentation. I elaborate on my discussions in Chapter 4.

1.10.3.1 PRA-based workshops

I participated in 14 field visits (one or two at each of 14 of the 17 involved schools) and co-facilitated³ PRA-based workshops with groups of teacher-participants (approximately 4 to 6 in a group). The focus of these workshops with teachers was the experiences, needs and expectations of teachers who teach learners with visual impairment, as well as their recommendations on suitable content for inclusion in a related postgraduate qualification. I furthermore co-facilitated two PRA-based workshops with 43 expert stakeholders in the field of visual impairment. During the first workshop, stakeholders were requested to provide input for the proposed postgraduate programme in terms of suitable content for the modules. In the second workshop, stakeholders had the opportunity to elaborate on suitable module content, and also reflected on their involvement in the process of programme development.

Following initial data analysis and the process of compiling a draft programme outline, member-checking was done during six colloquiums, involving the participating teachers and stakeholders. The purpose was for them to verify and confirm the identified themes and sub-themes, and to elaborate on the proposed module content of the programme as they saw fit. These colloquiums once again took the form of PRA-based activities and discussions. Revision of the initially proposed module content was then done based on the participants' feedback and input. By employing PRA-based activities for data generation, participants were able to express themselves openly, share their ideas and identify their needs, expectations and best practices, not only with the research team but also with their peers (Bergmark, Ghaye & Alerby, 2007).

1.10.3.2 Observation-as-context-of-interaction

Observation-as-context-of-interaction highlights the importance of a researcher being acquainted with the context in which a study is conducted, and the human interactions that occur in that context among participants (Kumar, 2005). For this type of observation, participants are expected to participate actively in their social settings and

³ As my study forms part of a broader research project, field visits and data generation sessions each involved a team of researchers and field workers, taking responsibility for different tasks and research sites.

not modify their behaviour due to the presence of an observer (Angrosino & Mays de Perez, 2000). Observation implies the potential benefit of researchers gaining an “insider perspective of the group dynamics and behaviours in different settings” (Maree, 2007, p. 84). To this end, observation allowed me and other members of the research team to enter the world of the participants as spectators of their interactions.

For my study my co-researchers and I observed the participants’ teaching and interaction with learners for the duration of one morning at each school we visited. In addition, all PRA-sessions were observed and recorded. By utilising this technique, I could obtain data on how participants taught and which needs they displayed when working with learners with visual impairment (Kumar, 2005). Through observation, I hoped to strengthen relationships with the participants (teachers) to work harmoniously with them during other data generation activities.

Observation-as-context-of-interaction furthermore enabled me and the participants to find meaning in their experiences and interactively brainstorm possible solutions to the general challenges the teachers reported to be facing (Patton, 2002). A potential limitation associated with observation-as-context-of-interaction is that, at times, what happens in the field may not necessarily be of interest to the researcher and/or participants. To this end, I purposefully selected participants who seemed knowledgeable and able to generate data that would be relevant to the current study (Ratner, 2002). I furthermore regarded all my observations as providing contextual background in terms of the research sites (schools) that participated.

1.10.3.3 *Semi-structured individual interviews*

Semi-structured interviews are utilised to generate data on people’s opinions, beliefs and practices in relation to a topic under study (Krueger & Casey, 2000). I facilitated nine semi-structured interviews to generate data in discussion with experts who hold knowledge in the field of visual impairment (Krueger & Casey, 2000), more specifically with stakeholders who were not able to attend the two stakeholder colloquiums, or for follow-up discussions with specific teacher-participants to explore or clarify uncertainties that I identified during the PRA-based activities and discussions. During the semi-structured interviews with individual participants I aimed to gain an understanding of their experiences and needs when working with learners with visual impairment. Stakeholders outside the school context furthermore provided expert

knowledge on visual impairment, the support provided to schools, and the development of a suitable postgraduate qualification and its content, for practising and prospective teachers.

One advantage of face-to-face interviews can be linked to the social interaction that takes place between an interviewer and interviewee as equal partners, allowing the interviewer to obtain information relevant to the research (Russ-Eft & Preskill, 2001). This way of social interaction varies from other forms of social interaction as the interviewer will generally not convey personal feelings, thoughts or beliefs regarding the matter that is being discussed (Russ-Eft & Preskill, 2001). Another advantage of semi-structured interviews is that questions and responses can be clarified while remaining flexible (Finn & Jacobson, 2008). However, face-to-face interviewing may pose the challenge of creating suitable ways for interviewees to enter the world of the interviewer (Merriam, 2002). In this regard, I respected the participants, yet remained relevant and professional, respecting ethical conduct at all times during the interviews and keeping the focus on the topic under discussion without being distant and rigid (Russ-Eft & Preskill, 2001).

1.10.3.4 Audio-visual data generation and documentation techniques

Audio-visual data provides evidence of occurrences (Mason, 2005). Visual data for the current study included PRA-matrices, as well as photographs of these, while audio data included voice recordings of the PRA presentations as well as the interviews I conducted, which were all transcribed verbatim for the purpose of data analysis. In using these techniques I attempted to gain documented information on the discussions that occurred (Byrne, 2014). Audio-visual data in the form of video-recordings and photographs enabled me to capture participants' contributions as they engaged in PRA-based discussions and presentations. At a later stage of the study, photographs enabled me to review the content that had been discussed with the participants again and again to complete the data analysis (Mason, 2005).

I relied on the advantage of including audio-visual data related to the possibility of a researcher revisiting events and at times reliving the occurrences of data generation. Additionally, these strategies allowed for the immediate capturing of what was taking place in the research field (Byrne, 2014). A potential challenge when utilising audio-

visual strategies concerns the possibility of identifying participants on photographs and in video-recordings (Wiles et al., 2008). I avoided this challenge by requesting permission from the participants to reveal their identities in audio-visual material if they chose for me to do so. In cases where the participants did not grant permission, I disguised their identities in any written work, or transcribed voice recordings.

1.10.3.5 *Field notes and reflective journal*

The members of the research team and I used field notes to document all occurrences, observations and the discussions that took place (Wolfinger, 2002). I made field notes every time I interacted with the participants or observed research activities. These notes included what I noticed in the field that was significant to the study and what attracted my attention. My field notes focused on how I experienced certain phenomena, the questions I asked to broaden my knowledge, what was required of me to read up on, as well as any behaviour or interaction that stood out for me.

I compiled field notes to document my observations, and to keep record of the data generation processes that occurred. Wolfinger (2002, p. 89) calls this strategy of note taking “the salience hierarchy”. I compiled both reflective and descriptive field notes. Firstly, my descriptive field notes captured what I saw and experienced in the field, and included the processes of activities that were conducted, as well as notes on the physical settings and dynamics among the participants (Mack, Woodsong, MacQueen, Guest & Namey, 2005). Secondly, reflective field notes contain the emerging themes of the study, how the experiences of the participants were connected, and how meaning was given to certain events (Mack et al., 2005). This kind of recording I relied on assisted me in capturing the process of interaction and in understanding how the physical environment may have affected such interaction (Mulhall, 2003). It furthermore allowed me to describe the interactions I observed in my own words, interpreted these and then drew conclusions from the notes I made (Mulhall, 2003).

A reflective journal allowed me to think in an analytical and critical manner about my study, and to note these thoughts (Ortlipp, 2008). The recordings I captured in my journal included reflections on the events that I became aware of while in the field, things that were interesting or beneficial to the phenomenon under study, and how

ideas were used to develop and expand my understanding of the topic (Bean, 1996). As such, a reflective journal allowed me to record my thoughts about the study during and after the field visits. It also provided me with the opportunity to document my understanding of the theoretical concepts I relied on as well as how I experienced the topic I explored (Morley-Warner, 2000). I furthermore used my journal as a reflective measure in the sense that, before I entered the field, I documented my own expectations and assumptions, which were then supported or disputed during and after data generation sessions.

Both field notes and reflective journals imply the benefit of data being accessible to the researcher at any time, and providing the researcher with a tool to capture open ended ideas and perceptions (James, 2007). In other words, the researcher has the opportunity to reflect on events even after leaving a data generation session. As a possible challenge relates to the researcher facing the risk of being biased and subjective, I maintained constant contact with my co-researchers and supervisor to check my own interpretations against theirs, thereby relying on reflexivity (James, 2007).

1.10.4 Data analysis and interpretation

I conducted thematic inductive analysis. This process of analysis entails the recognising, analysing, and reporting of patterns, known as themes within data. It puts data in order and allows the researcher to describe it in detail (Braun & Clarke, 2006; Strauss & Corbin, 1988). The various aspects of a research topic can be interpreted through thematic analysis (Braun & Clarke, 2006). This method of analysis generally enables the researcher to report meaning, experience and the reality of participants, as well as how these may impact on the occurrences in participants' environments. Furthermore, thematic analysis focuses on how participants define and make sense of their experiences.

In thematically analysing the transcripts, PRA-matrices, audio-visual data, my field notes and reflective journal, I followed the steps proposed by Braun and Clarke (2006) as well as Vaismoradi, Jones, Turunen and Snelgrove (2016). Therefore, I firstly familiarised myself with the data by reading and rereading all the data sets and noting my initial ideas. This first phase is called initialisation, whereby, subsequent to reading

the data, I looked for and started coding the main issues. Secondly, still in the process of generating initial codes while classifying and comparing responses in checking for similarities and differences, I assembled and clustered identified codes to assign labels to these. Thirdly, the labels with their clustered codes were pulled together into themes and sub-themes. These themes were related to existing literature to make inferences. During the next stage, I generated clear definitions for each theme and sub-theme. Finally, I produced a report that includes extract examples and a final analysis of the selected extracts (Consult Chapter 5). I elaborate on the data analysis I completed in Chapter 4.

1.11 ETHICAL CONSIDERATIONS

At the onset, participants were informed about how the study would proceed as well as about the purpose of the broader project. They were allowed to ask questions concerning the study, so that they could consent with a clear understanding (Ensign, 2003). After obtaining informed consent, I proceeded with field work. I respected the privacy of participants, as well as confidentiality and anonymity at all times. As such, all information was treated as confidential, and I did not disclose the participants' identities in visual data if they did not provide permission for this to be done. Generated data is kept safe for a period of fifteen years (Halai, 2006) in a secure place at the University of Pretoria.

Participants had the right to withdraw from the study if they wished to do so. They were thus informed that their involvement in the study was voluntary (Kerkale & Pittila, 2006). Even though no such incidences occurred, if any participant was to experience unfairness or inequality, or wished to be excluded, the participant would have been allowed to withdraw (Jelsma & Clow, 2005). Furthermore, if participants felt that their integrity was not upheld or appeared suspicious about experiencing potential harm, they would have been allowed to withdraw (Ensign, 2003). Participants were informed at the onset of the study that no harm was intended or foreseen, and also what the potential positive effect of their participation entailed.

In support of the protection of the welfare of participants, I thus ensured that any potential emotional or psychological harm would be limited. In the unlikely event of harm occurring, it would have been dealt with in a professional and confidential

manner, taking reasonable steps to resolve negative experiences (Halai, 2006) by debriefing the participants and then referring them for professional support. Furthermore, no disempowerment or exploitation of the participants took place (Olivier & Fishwick, 2003).

Throughout the study, I avoided deception by not misleading the participants with regard to the kind of data required from them or to the content and purpose of the study (Jelsma & Clow, 2005). No information about the study was withheld from the participants (Hemming, 2005), and I clarified the roles and relationships before data generation commenced. Participants were given the opportunity to raise their concerns whenever they wanted to do so (Jelsma & Clow, 2005).

I furthermore considered the rights of participants with visual impairment by adhering to the specific process relevant for obtaining consent from such participants. For this purpose, participants had representatives who could orally present the consent to them and sign on their behalf, as participants agreed to be part of the study (University of Wisconsin, 2007). Partially sighted participants used magnifying glasses to read and sign the consent form (University of Wisconsin, 2007). Participants were given sufficient time to review the consent form, ask questions and receive further clarity before providing informed consent. I include more detail on the strategies I employed in conducting ethical research in Chapter 4.

1.12 RIGOUR OF THE STUDY

In aiming to complete a rigorous study, I attended to the quality criteria of credibility, dependability, confirmability, transferability and authenticity. Given my active involvement in the study, I attempted to understand participants' experiences and present these in a credible manner, by relying on my role as co-facilitator of research activities. I furthermore included member-checking that also strengthened the credibility of the study (Tobin & Begley, 2004). For dependability, I employed rigorous research practices (Shenton, 2004). In ensuring confirmability, even though it was difficult to remain objective in this participatory qualitative study, I attempted to eliminate possible bias by providing truthful derivations of the obtained data and through reflexivity (Shenton, 2004; Tobin & Begley, 2004).

In providing detailed descriptions of the participants' experiences and views, I aimed to strengthen transferability. I did not attempt to obtain generalisable findings based on my selected epistemology and methodological approach; yet the reader may determine to what extent the findings can be transferred to similar contexts. Finally, as the conducted study is evidence-based and involved participants who work with learners with visual impairment on a daily basis, authenticity is supported (Jones, 2013). I elaborate on the rigour of my study and the strategies I employed to meet the mentioned criteria in Chapter 4.

1.13 OUTLINE OF CHAPTERS

In this section I provide a brief overview of the content of each chapter.

Chapter 1: Setting the scene and contextualising the study

Chapter 1 provides an introduction and broad overview of the study as well as the rationale for my decision to explore the specific phenomenon. Prior to introducing the selected paradigms, research design and methodological choices briefly, I formulate the research questions, state the purpose of the research and clarify key concepts. I also stipulate my assumptions, and refer to ethical considerations and quality criteria.

Chapter 2: Visual impairment and inclusive education

In Chapter 2 I explore existing literature in the fields of visual impairment and inclusive education. I discuss the causes, prevalence, types and diagnosis of visual impairment, some general needs of learners with visual impairment and the training that teachers in South Africa currently receive to support such learners. In the second part of the chapter, I elaborate on the underlying principles of inclusive education, the progress with implementation of policy in South Africa as well as international trends in the field. I conclude the chapter by explaining my conceptual framework.

Chapter 3: Contemplating the use of Participatory Reflection and Action for programme development

In this chapter I provide a comprehensive overview of PRA by elaborating on the history and meaning of PRA, the process it entails and some international trends of application. I discuss the underlying principles of PRA, as well as advantages and

associated challenges. Next, I focus on programme development and the possibility of applying PRA for this purpose against the background of my research questions.

Chapter 4: Research process and methodology

In Chapter 4, I describe the research process I followed in detail, in terms of the paradigmatic choices I made, the research design and methodological strategies I relied on in undertaking the study. To this end, I elaborate on the selected methods of data generation, documentation and analysis, and explain the reasons for the choices I made. I conclude the chapter by discussing the ethical considerations and quality criteria I adhered to when conducting the study.

Chapter 5: Results of the study

In Chapter 5, I present the results of the current study in terms of the themes and sub-themes that emerged following the inductive thematic data analysis I completed. I enrich my discussion of the results by providing verbatim and visual evidence for the themes and sub-themes I present.

Chapter 6: Findings of the study

In Chapter 6 I interpret the results I obtained against the background of existing literature and the conceptual framework I compiled and presented in Chapter 2. To this end, I highlight similarities, contradictions, silences and new insight stemming from the current study.

Chapter 7: Conclusions and recommendations

In Chapter 7 I provide an overview of the previous chapters. I then draw conclusions by addressing the research questions I formulated in Chapter 1. I reflect on the potential value of the study and identify the challenges I encountered, as well as potential limitations of the study. Finally, I formulate recommendations for training, practice and future research.

1.14 CONCLUSION

In this chapter, I introduced my study and outlined the rationale and purpose of my research, against the background of the broader project that my study forms part of. I formulated research questions, stated my assumptions and clarified key concepts. I introduced the conceptual, epistemological and methodological stances I took, and

then explained how I explored the use of PRA for the development of a postgraduate qualification in terms of the selected research methodology. I also briefly referred to ethical considerations and quality criteria.

In Chapter 2 I focus on the literature review I completed in the fields of visual impairment and inclusive education as background to undertaking the empirical part of my study. With regard to visual impairment, I define the concept, describe types of visual impairment, the causes, prevalence, diagnosis as well as the prominent needs of learners with visual impairment. I pay attention to the underlying principles and benefits and challenges of inclusive education, as well as international and national implementation of existing policy. I conclude the chapter by explaining the conceptual framework I compiled.

CHAPTER 2

VISUAL IMPAIRMENT AND INCLUSIVE EDUCATION

2.1 INTRODUCTION

In the previous chapter, I set the scene by providing relevant background and explaining the rationale for the current study. After stating the purpose, I briefly introduced the methodological decisions I made and related these to the formulated research questions. I referred to the ethical principles I considered in undertaking the research and indicated the quality criteria I strived to adhere to.

In this chapter, I explore existing literature on visual impairment and inclusive education as contextual background to the study I undertook. I discuss the various forms of visual impairment, the diagnosis of the condition as well as its prevalence and causes. I furthermore explore the prominent needs of learners with visual impairment in relation to their school-related as well as psycho-social challenges and needs, and refer to current school provision and support in South Africa for these learners.

As part of my discussion on inclusive education that follows in the second part of the chapter, I elaborate on the underlying principles, benefits and challenges related to inclusive education policy implementation. I furthermore refer to national and international trends on implementation of existing policy. I conclude the chapter with a discussion of the conceptual framework I compiled.

2.2 VISUAL IMPAIRMENT IN SOUTH AFRICA

In this section I explore the phenomenon of visual impairment and refer to different forms of the condition. I highlight the diagnosis, prevalence and causes of visual impairment, and then discuss typical characteristics, needs and service provision for learners falling in this category.

2.2.1 Understanding visual impairment as a disability

Visual impairment implies a loss of vision with some people being totally blind and others partially sighted (Special Education Guide, 2013). In an education setting,

visual impairment indicates a learner's inability to use vision to participate optimally in educational activities (Special Education Guide, 2013). Some learners may be born without or with limited vision while others may become visually impaired as they grow older (Sacks & Silberman, 2000).

When describing visual impairment three concepts that are often used simultaneously are important, namely visual acuity, field of vision and visual functioning. Visual acuity refers to the eye's ability to see details (Kulmala, 2010) whereas field of vision relates to the field that both eyes can see in the front of one without difficulty (Kulmala, 2010; Waterfield & West, 2008); visual functioning entails the degree to which one can use vision for daily activities (Kulmala, 2010). Given these descriptions, the concept *visual impairment* is used as an umbrella term to indicate a decrease in one's ability to see to a certain degree. Even though this condition can sometimes be corrected, it will affect one's general functioning, learning and development, typically resulting in decreased functioning (Kulmala, 2010; Waterfield & West, 2008).

Visual impairment or a loss of vision can sometimes be corrected by medication, optical lenses or surgery. According to the World Health Organisation (2007), visual impairment can be corrected when identified at an early stage, provided it is a condition that can be corrected. It is, however, important to keep in mind that various domains can affect the development of a learner with visual impairment detrimentally. Developmental domains such as motor skills, language, cognition and social skills, among others, may specifically be affected (Child and Youth Health [CYH], 2018).

Limited exposure to contexts other than their homes can create more harm than good to learners with visual impairment as it may necessitate a situation of not having to deal only with the visual impairment but also with associated underdeveloped domains. This implies that interaction with the environment is very important for a learner with visual impairment for the necessary skills to be developed and not to lag behind to function optimally (CYH, 2018).

Learners with visual impairment may show signs of this condition at an early age, even as soon as shortly after birth, if a visual screening is conducted. Among others, signs can include repeated "shutting or covering of one eye, sitting too close to the television or holding toys and books close to the face, frequent squinting, blinking, eye-rubbing,

or face crunching, especially when there's no bright light present" (NICHCY, 2012, p. 3). If not detected and attended to, an affected learner will face an increased risk of limited exploration, and will, as a result, have to rely more strongly on tactile and auditory abilities (American Foundation for the Blind, 2011).

In addition to visual impairment having detrimental effects on children – learners in school settings specifically – it can also disrupt adulthood. Educational and employment opportunities may be limited, with people's quality of life generally being affected in a negative way (Resnikoff, Pascolini, Mariotti & Pokharel, 2008). As visual impairment is often caused by an uncorrected refractive error (Consult Section 2.2.4), the presence of amblyopia may furthermore have a negative effect on learners' school performance and their ability to acquire knowledge. This may in turn affect the manner in which they view themselves, and can imply the threat of future blindness (Ezhilvathani, Suruthi & Jeiganesh, 2019). Despite such potential negative consequences, Grum and Kobal (2010) indicate that blindness as well as other special needs may be avoided in many cases when identified and intervened at an early age.

2.2.2 Forms of visual impairment

Visual impairment can firstly take the form of partial sightedness, which implies loss of vision to a certain extent even with rectification (Disability info South Africa, 2016; NICHCY, 2004). A learner with partial sightedness already requires special educational support. Secondly, the condition of low vision refers to vision loss of between 20/70⁴ and 20/160 degrees, which cannot be corrected (Navpreet, 2018; NICHCY, 2004). With low vision, learners can still use their remaining vision with the assistance of their other senses to learn (Disabled World, 2018). In school, the adaptation of light and large print material benefits such learners.

Next, legal blindness refers to a loss of vision, ranging from 20/200 to 20/400 degrees. This condition is considered as severe low vision (Disabled World, 2018; NICHCY, 2004) or profound visual impairment, which is close to total blindness (Lewis & Allman, 2000; NICHCY, 2004). Finally, total blindness represents the absence of any light

⁴ A visual acuity measurement of 20/70 means that a person who is 20 meters away from an eye chart will see what a person with unimpaired or 20/20 vision sees from 70 meters away.

perception (NICHCY, 2004; Vitale, Cotch, Sperduto & Ellwein, 2006). In such a case, Braille and other non-visual aids are required for instruction and learning activities to take place.

Additional forms of visual impairment include refractive errors, which refer to near-sightedness, farsightedness and astigmatism. In the case of near-sightedness, items are focused on the retina, resulting in far-off items appearing unclear and blurry (American Foundation for the Blind, 2011; Dandona & Dandona, 2001). In the case of farsightedness, items are focused behind the retina, implying difficulty to focus on items that are close (American Foundation for the Blind, 2012; Glass, 2002). In the case of astigmatism, a bent cornea keeps light rays from accurately focusing on one area of the retina, resulting in the inability to focus on images that are far or near (American Foundation for the Blind, 2012). Refractive errors can, however, be corrected with glasses, with special educational assistance not necessarily being required.

Central loss of vision usually occurs from damage to the area known as the macula, the centre of the retina, thus being categorised as loss or obstruction of visual field (Navpreet, 2018). Loss of central vision is yet another form of visual impairment that creates a blur or blind spot, with the side (peripheral) vision being integral in this case (Navpreet, 2018). This form of visual impairment can make reading, the recognition of faces and differentiation of detail in the distance challenging (Hatton, 2014). Next, loss of side or peripheral vision is characterised by an inability to differentiate anything to one or both sides, or anything directly above and/or below the level of the eye. In this case, central vision remains, making it possible to see directly ahead. Losing side vision may affect mobility and if severe, may cause slow reading speed as a result of seeing only a few words at a time (Dandona & Dandona, 2001; Hatton, 2014). This is also known as tunnel vision (Hatton, 2014). Another form of visual impairment relates to blurred vision that causes both the near and far to appear out of focus, even with the best correction possible (Navpreet, 2018). Blurred vision can cause a learner to struggle when working on a computer for extended periods of time. The learner may also experience difficulty when copying what is written on the board (West, Rubin & Broma, 2002).

The generalised haze type of visual impairment causes a sensation of a glare that may spread over the entire viewing field (Margrain, 2000). Next, light sensitivity occurs when normal levels of radiance overpower the visual system, thereby creating a washed out image and/or glare disability (Bourne, Flaxman, Braithwaite, Cicinelli, Das & Jonas, 2017). People with extreme light sensitivity may, as a result, experience pain or uneasiness from fairly standard levels of radiance (Bourne et al., 2017). With night blindness, the individual is unable to see outside at night under starlight or moonlight, or in dimly lighted interior areas such as cinemas (Bourne et al., 2017). All these forms of visual impairment (discussed in this section) are said to affect learning in terms of, for example, reading speed, writing between the lines and generally grasping information that is presented visually (West et al., 2002). Learners' mobility may furthermore be affected by visual impairment, in extreme cases up to the point where they require orientation and mobility training (West et al., 2002).

Finally, even though colour vision deficiency is not classified as a type of visual impairment, this related condition implies difficulty in terms of colour discrimination (Betsy, 2003; Disability info South Africa, 2016; Glass, 2002; Mandal, 2019). Three main categories of colour vision deficiency are distinguished, namely red-green vision deficiency (protanopia), blue-yellow vision deficiency (tritanopia) and total colour vision deficiency (achromatopsia) (Broackes, 2009; Neitz & Neitz, 2000). In these categories various degrees of deficiency can be differentiated, for example anomalous trichromacy, dichromacy, protanopia, tritanopes and monochromacy (Betsy, 2003; Birch, 2012; Mandal, 2019).

2.2.3 Diagnosis of visual impairment

Even though visual impairment used to be listed as “diseases of the eye” in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), visual impairment is no longer listed in the DSM-V (APA, 2013). According to the WHO (1992), the following criteria apply when diagnosing visual impairment, with at least one of these present (WHO, 1992):

- ❖ Visual acuity in one or both eyes despite the best possible correction:
 - Legal blindness – 20/200 or less at a distance and/or near.
 - Low vision – 20/50 or less at a distance and/or near.
- ❖ Visual field restriction with both eyes:

- Legal blindness – remaining visual field of 20 degrees or less.
- Low vision – remaining visual field of 60 degrees or less.
- Medical and educational documentation of progressive loss of vision, which may in future affect the learner’s ability to learn visually.
- ❖ Other visual impairments, not perceptual in nature, resulting from a medically documented condition.

A diagnosis of visual impairment is typically done by a team of healthcare practitioners. More specifically, an optometrist usually examines, diagnoses, treats and manages visual system diseases (American Optometric Association, 2007). Prior to the optometrist making a diagnosis of visual impairment, a comprehensive investigation is required. The individual’s history is obtained from him or her, or from the primary caregiver in case of a minor and/or through previous medical records (Carlson & Kurtz, 2015; Rosenberg & Sperazza, 2008). In the case of children, parents/caregivers are requested to provide the necessary history and background in terms of the child’s social and medical history, visual functioning, ocular history and specific needs (Rosenberg & Sperazza, 2008).

Subsequent to obtaining the necessary background information, is an ocular examination. This entails an assessment of the level of impairment and its impact on the functioning of the individual (Freeman, Munoz, Rubin & West, 2007). By checking the physical causes of the impairment, an ocular examination can also determine any visual abilities that may be left (Carlson & Kurtz, 2015). Such an examination takes into consideration the individual’s developmental and chronological age and needs.

Five important aspects are typically considered when conducting an ocular examination. Firstly, visual acuity is assessed to determine the level of vision loss, as such knowledge can assist with an understanding of the constancy of the impairment and the planning of intervention measures (American Optometric Association, 2007; Rosenberg & Sperazza, 2008). The second part of an ocular examination focuses on refraction, which entails the prime alteration for paramount visual acuity and indicates the extent of intensification required for specific tasks (American Optometric Association, 2007). Thirdly, binocular vision and optical motility are assessed, which involves sensitivity of contrast and the effect of lenses, among other things (American Optometric Association, 2007; Carlson & Kurtz, 2015). Next, visual field is assessed to “determine the presence and location of relative and absolute losses of sensitivity”

(American Optometric Association, 2007, p. 17), and finally, an ocular health assessment is done that includes an evaluation of the eyes' wellbeing (American Optometric Association, 2007; Rosenberg & Sperazza, 2008).

Besides obtaining background information and conducting an ocular examination, additional evaluations may be performed when a specific eye condition is detected, or where school- or work-related needs are evident or insufficient reaction is shown in response to an intervention (American Optometric Association, 2007). Additional tests may include a glare test to assess vision loss connected with light sensitivity and scatter (Van den Berg et al., 2009). As such, a diagnosis of visual impairment depends on various factors and an assessment by a qualified optometrist.

Being guided by the International Classification of Diseases 10th Revision (ICD 10) code (American Psychiatric Association, 2013) when making such a diagnosis, low vision is regarded as a visual functioning impairment even when treated and/or in the case of standard refractive correction (Hayhoe, 2012). Additionally, a person with visual impairment is seen as someone with limited vision for use, planning and task execution (Hayhoe, 2012; WHO, 1992). In an educational setting, visual impairment includes learners who have visual loss and "require more than glasses to function adequately in the classroom" (Bradley-Johnson, 1994, p. 38).

According to the Hong Kong Department of Health (2008), visual impairment can be classified as mild, moderate or severe, which is also applied in South Africa (Hong Kong Department of Health, 2008; Disability info SA, 2016). Learners who experience mild visual impairment can read largely printed characters, while learners with moderate impairment can differentiate between dark and bright colours, although visual media may be required. Severe impairment implies the possibility of complete blindness (Hong Kong Department of Health, 2008).

2.2.4 Prevalence and causes of visual impairment

As populations grow, the number of vision loss cases also seems to be on the increase worldwide, despite some being unreported (Flaxman et al., 2017). In the case of learners, as only some of them may be enrolled at institutions, numbers are often merely estimated, with the ones not attending schools or institutions being unaccounted for in available statistics (Statistics South Africa, 2011). In many cases

of visual impairment in South Africa, individuals may not seek assistance or support due to, for example, the unavailability and affordability of support services, distances from special schools, limited trust in existing procedures, or not being informed of available services (Abdianwall & Güçiz, 2018). As stated in Chapter 1, the South African census report of 2011 reveals that, out of a population of 43,3 million citizens at the time, with 19 million children, approximately 496 000 children (0 to 19 years old) were reported to be disabled (Statistics South Africa, 2011).

In terms of the prevalence of visual impairment specifically, countries such as Germany (0,19%), Japan (0,97%) and the United States of America (2,85%) remain in the lower end of the range when compared to South Africa and other African countries (Alswailmi, 2018). In the African region where visual impairment has been researched, the prevalence is estimated as 5,38% for Botswana, and 11% for both Nigeria and Zambia (Alswailmi, 2018). According to Maake and Olalekan (2015) who conducted a study in Giyani, South Africa, involving 400 participants between the ages of six and 92 years who were receiving eye-care services at a local hospital at the time, the approximate prevalence of visual impairment in that region is 56%. Of these cases, general visual impairment accounted for 28,0%, low vision for 17,1% and blindness for 10,9% of those receiving eye-care services.

In terms of a global perspective, out of the world population of 7,3 billion in 2015, 253 million people were visually impaired, of which 36 million were blind and 217 million moderately to severely visually impaired (Balantrapu, 2017). These variations in terms of prevalence in different regions can be attributed to people with visual impairment often living in low to middle income countries, in many cases not being able to afford medical services (Balantrapu, 2017). In some of these countries, a shortage of medical specialists is evident, resulting in people affected by visual impairment not being provided with the relevant eye-care services (Alswailmi, 2018).

In another study conducted in South African schools in Durban with five to 15 year old learners, out of a total of 5 599 learners living in 2 712 households that were counted, the prevalence of uncorrected, presenting and best-corrected visual acuity of 20/40 or worse in the better eye was 1,4%, 1,2%, and 0,32% respectively (Naidoo et., 2003). Refractive error was the cause in 63,6% of the 191 eyes with compact vision, amblyopia in 7,3%, retinal disorders in 9,9%, corneal cloudiness in 3,7%, additional

causes in 3,1% and unexplained causes in the remaining 12,0% of the cases (Naidoo et al., 2003). This study furthermore indicated exterior and anterior fragment anomalies in 528 (10,8%) of the cases and myopia in one or both eyes in 2,9% of the cases. This, however, was associated with improved parental education (Muhit, Shah, Gillbert, Hartley & Foster, 2007; Naidoo et al., 2003; Resnikoff et al., 2008). Hyperopia in one eye existed in 1,8% of the cases when measured, using retinoscopy and in 2,6% of the cases when using autorefraction (Naidoo et al., 2003).

When considering possible prenatal causes of visual impairment, high alcohol consumption by an expecting mother as well as rubella infection, or other chromosome disorders such as Down Syndrome may result in a child being visually impaired (Blumsack, 2009). Perinatally, visual impairment can be caused by retinopathy of prematurity (Mosca, 2015). When retinal blood vessels are not fully developed by the ninth month, visual impairment may also occur (Gogate, Gilbert & Zin, 2011). It can furthermore be the result of oxygen need during delivery (Gogate et al., 2011). Postnatally, the normal development of vision can be affected by a number of factors, such as vitamin deficiencies, especially vitamin A causing corneal scarring, or by diseases such as HIV and AIDS (WHO, 2011). In addition, visual impairment in South Africa is often related to diseases such as malaria and TB, which are highly prevalent in the country (WHO, 2011).

In addition to the causes mentioned in the previous paragraphs, the various forms of partial sightedness can be related to specific factors. Cataract formation, for example, entails the progressive dimming of the crystalline lens inside the eye (Disabled World, 2018; Naidoo et al., 2003), which will distort and eventually blur vision, while glaucoma can be related to amplified intra-ocular pressure consequent to visual field loss. In the case of glaucoma causing visual impairment, good lighting is mandatory due to this type of vision being mostly affected in dim light and at night time (Cleveland clinic, 2019; Disabled World, 2018). Next, trauma due to accidents and/or injuries in the eye(s) may also cause visual impairment (Metcalf, 1998; Naidoo et al., 2003). In similar cases, visual impairment may be caused by diseases or infections damaging the cornea, thereby affecting visual acuity (Disabled World, 2018).

Another cause of visual impairment is related to albinism, which is a genetic condition that results in this group of people typically experiencing light sensitivity, poor visual

acuity and refractive errors (Disabled World, 2018). In addition, about 60% of all eye diseases, such as congenital cataracts, congenital glaucoma and eye malformations can be inherited (Dehghan, Kianersi, Moazam & Ghanbar, 2010). If not corrected, these conditions may cause serious vision-related challenges as the child develops.

As stated before, according to the WHO (2007), up to 75% of all childhood visual impairment conditions can be prevented or rectified when one is aware of these cases, when services are available and when intervention is accessed. In this regard, Naidoo et al. (2003) indicate that around 80% of all South African citizens lack the necessary service provision for visual impairment-related problems. As a result, some of the reasons for refractive errors not being corrected in South Africa include the availability and affordability of health care services, as well as early identification and screening not taking place (Resnikoff et al., 2008).

2.2.5 Prominent needs of learners with visual impairment

Learners with visual impairment generally experience a range of challenges that may affect their general functioning and development. Due to the focus of my study, I discuss only typical school-related and psycho-social challenges and needs that learners with visual impairment often experience.

2.2.5.1 School-related challenges and needs

The ability to see is valued as one of the five basic senses that human beings use for learning and communication, with vision and the auditory sense being viewed as central. Limited or absence of vision can have detrimental effects on one, especially on a learner's learning and development (Kapur, 2018). Delays in the development of a range of visually-related skills can, for example, compel learners to depend on their remaining senses, namely listening, touching, tasting and smelling when acquiring new knowledge and skills (NICHCY, 2012). As vision allows one to interact with the environment, learners with visual impairment may be affected more strongly than others by environmental factors, such as light and visual fatigue when attempting to interact with the environment and others (Waterfield & West, 2008).

However, learners with visual impairment are occasionally still expected to develop and learn like their sighted peers (Kapur, 2018). As can be expected, this is difficult,

and requires specific adaptations. For their own benefit, learners with visual impairment may, for example, need to learn how to move around in their environment safely; if not yet blind, by utilising their limited vision. In addition, some learners may require assistive devices or may have to rely on Braille for reading and writing (American Foundation for the Blind, 2011). Due to a lack of sufficient specialised institutions for learning and adequate human resources that can support learners with visual impairment, it has become increasingly important for such learners to be admitted to and supported in inclusive or full service schools in South Africa.

As indicated, learners with visual impairment display specific school-related needs. As they experience difficulty to observe and note visual cues provided in the environment, it is important for these learners to be trained on how to use their other senses effectively (Sacks & Silberman, 2000). Even though visual impairment does hinder a learner's ability to manipulate stimuli that depend on vision, abstract reasoning that relies on tactile and auditory concepts can be developed (Mosca, 2015). If born visually impaired or if visual impairment develops at an early age, a learner's language and cognitive development may also be affected (Willings, 2017), necessitating the need for additional stimulation and support.

Learners with visual impairment are furthermore often challenged by a limited attention span and may experience problems with memory (Fazzi, Galli & Micheletti, 2012). These learners may struggle with communication in terms of the recognition of items belonging to similar semantics. To this end, they may make comments that seem irrelevant in the specific context (Mosca, 2015; Tadić, Pring & Dale, 2010). In addition, as learners with visual impairment are unable to view pictures and diagrams when being taught subject content, these aspects need to be taught and communicated in ways that make sense to them, and encourage their participation in the learning process (Penda, Ndhlovu & Kasonde-Ng'andu, 2015).

Therefore learners with visual impairment need to be accommodated in more than one way in the school context. They need to have access to the curriculum as well as the learning material in such a way that they may learn and develop (Kapur, 2018). For learners with visual impairment to be able to learn optimally, most teaching has to take in verbal format and possibly include tactile components, where learners use their other senses to participate in educational activities (Carney, Engbretson, Scammell &

Sheppard, 2003). To this end, the curriculum needs to be adapted in ways that may benefit these learners, and teachers need to be experienced in verbally providing lessons and assessment tasks, include Braille material for learners to participate in learning, and use repetition when explaining new content so that learners with visual impairment can understand and form part of the instruction and learning process (Johnson-Jones, 2017). Additionally, for these learners to be able to thrive scholastically, they need to be accommodated in terms of classroom seating arrangements with sufficient space between chairs and desks, with partially sighted learners seated in front or in a position that allows them to best see the teacher and the provision of material such as Braille, large font print and/or audio tapes (Mastropieri & Scruggs, 2010; Tadić et al., 2010).

As indicated, learners with visual impairment can be made aware of what is taking place in class through verbalisation and by involving the remaining senses and also their skills for spatial perception (Andreou & McCall, 2010; Bradley-Johnson & Morgan, 2002). Since these learners, especially those who are totally blind, cannot easily participate in learning that involves normal textbooks, Braille books as well as other audio material and related assistive devices are important (Johnson-Jones, 2017). In many cases teachers are not sufficiently equipped to work with learners with visual impairment, making the use of assistive devices, curriculum differentiation and the adaptation of teaching methods difficult (Silberman, Bruce & Nelson, 2004). Some strategies that teachers may rely on include the implementation of hands-on learning, keeping rules similar for everyone, teaching from the concrete to abstract level, talking out loud when writing on the writing board and providing copies of what is being presented to the partially sighted even if they read through magnifying glasses, being specific/descriptive when communicating with learners, and explaining changes or transitions before they occur (Negash, 2017). In this regard, it is important for learners with visual impairment to be well prepared for any form of transition, either moving from grade to grade or from school to tertiary level (Carney et al., 2003).

In addition to learners with visual impairment experiencing the need to be taught in a specific way, they also need to be assessed in a suitable way (TVI Consortium, 2016). Assessment procedures need to be adapted in the same way that the curriculum needs to be differentiated and teaching methods adapted. Learners can, for example,

be assessed orally or with the use of Braille in cases where the teacher is Braille proficient (Cox & Dykes, 2001). According to Bradley-Johnson and Morgan (2002), learners can be granted concessions in the form of scribes or amanuenses, and assessed in a separate examination venue where they can listen to audio-recorded question papers and respond orally without disrupting others. They usually require additional time to complete assessment tasks (Bradley-Johnson & Morgan, 2002).

In terms of physical resources, the infrastructure and school buildings need to suit the needs of learners with disabilities, including those with visual impairment (Department of Education, 2005b). For adaptations that may be required for classroom lay-out, lighting school grounds etc., consult Section 2.2.7 where I discuss these in more detail. For practical support, learners require suitable Learning and Teaching Support Material (LTSM) and assistive devices that may enhance their learning and support their participation in assessment tasks. In addition, these learners require human resources in the form of skilled teachers and qualified support personnel, such as teacher assistants, school nurses, occupational therapists, Braille instructors, as well as orientation and mobility instructors to facilitate their learning and acquisition of skills in the school environment (Brown & Beamish, 2012; Department of Basic Education, 2001).

In essence, the definition of visual impairment emphasises the importance of equity. By creating a non-discriminatory classroom and school environment with equal opportunities for all learners, teachers can promote participation and a feeling of belonging among learners with visual impairment (Bayram, Corlu, Aydin, Ortaçtepe & Alapala, 2015). Even though some learners with visual impairment may attempt to narrow the gap between themselves and other learners, teachers and the school community are required to encourage other learners to treat learners with visual impairment fairly and with respect (Bayram et al., 2015). Furthermore, to promote equity in the classroom and school environment, adjustments can be made to accommodate the special learning styles of the various learners (Lamichhane, 2017). In addition, the talents and interests of learners with visual impairment are important in activities such as music and sport, as participation in such activities holds the potential of promoting the social inclusion of these learners in society (George & Duquette, 2006).

2.2.5.2 Psycho-social challenges and needs

Visual impairment may hinder the development of a positive self-concept, which in turn can result in social relationship problems and/or poor scholastic performance (Augestad, 2017). Learners' self-concept typically comprises physical, moral, personal, family, social and academic aspects, and the related views of a person of the self (Datta & Talukdar, 2016). It is important that learners with visual impairment experience a sense of belonging, accompanied by healthy relationships with their peers that can promote their confidence, wellbeing and safety (Ministry of Education, 2006). To this end, it is important to make learners aware of their strengths, talents, interests and learning styles, and encourage them to have dreams and aspirations as well as the courage to realise these (Ministry of Education, 2006). Focusing on these aspects will address the domains of self-determination and social interaction, as stipulated in the expanded core curriculum (Sapp & Hatlen, 2010).

A study by Fitts and Warren (2003) indicates that learners with visual impairment generally compare themselves to their sighted peers and then realise that they do not match the social and academic skills and abilities of others (Datta & Talukdar, 2016). As a result, learners with visual impairment often have a low self-concept, as indicated in the previous paragraph. In addition, they need to be taught appropriate and acceptable etiquette, including suitable interpersonal communication in to be able to relate to their peers. They may also face the risk of being mocked or bullied by their sighted peers, with their views not necessarily being respected in scholastic and/or social settings (Brydges & Mkandawire, 2016).

As a result, learners with visual impairment may display limited faith in their sighted peers when requiring assistance (Mosca, 2015). At the same time, sighted learners may similarly not be reliant and/or interested to assist learners with visual impairment at all times, whether in the classroom or outside the school setting (Brydges & Mkandawire, 2016). Despite the possibility of stigma and stereotyping of learners with visual impairment, it is necessary that their human rights are respected and protected by both teachers and other learners, who need to be conscious of and respect diversity.

As learners with visual impairment often feel that other learners or adults do not understand them, they may withdraw socially, resulting in their having fewer friends than what is optimal (George & Duquette, 2006). Such withdrawal can result in additional challenges related to the underdevelopment of social skills due to the visually impaired having limited visual contact with the people and surroundings around them, and not being able to imitate visual cues, or to develop interpersonal skills (Khalim, Norshidah & Zalizan, 2011; Landsberg et al., 2015; Tolman, Hill, Kleinschmidt & Gregg, 2005). Furthermore, if not trained to become independent, learners with visual impairment may develop learned helplessness and then tend to overly rely on others, such as their parents or caregivers (George & Duquette, 2006). However, all these experiences seem to differ between male and female learners.

In this regard, it is important for learners with visual impairment to gain knowledge of conventional social cues that may assist them in navigating their way in society and earning respect in the school setting among their peers (Datta & Talukdar, 2016). Although some learners with visual impairment may not be able to experience cues and responses from their environment visually, it remains important for them to learn how to behave in a socially acceptable manner (Bailey, 2009). To this end, teachers are required to promote acceptable behaviour among learners with visual impairment by teaching them how to behave in public and informing them of acceptable social behaviour. Once again, this task is not solely dependent on the teacher, as the learner needs to be willing to learn and practise acceptable behaviour. In addition, parents need to ensure that the newly acquired behaviour is emphasised and reinforced at home (George & Duquette, 2006; Kass, 2012). Finally, learners can be paired with peers who may demonstrate and explain acceptable behaviour to the learner with visual impairment to learn from others (Sacks & Wolffe, 2006).

It remains important to guard against learned helplessness and the possibility of dependency when pairing learners, as the learner with visual impairment may view this as an opportunity to receive help in all circumstances (Khalim et al., 2011). If the mentioned strategies are not successful, learners can be referred for professional support to acquire socially acceptable behaviour and mannerisms (Sacks & Wolffe, 2006). Throughout, it remains important for learners with visual impairment to acquire self-care skills, such as daily living skills to take care of themselves in terms of feeding,

dressing, and bathing, to mention but a few required skills (Ministry of Education, 2006).

Another important developmental aspect for any learner is emotional development, coupled with emotional intelligence (Kumar & Signh, 2013). As in the case of learners who can see, it is important for learners with visual impairment to learn how to deal with their emotions when in an environment that is not necessarily supportive in terms of their disability (Kumar & Signh, 2013). These learners often face stigma and possibly even humiliation by their peers who may not understand them. As such, it is important for them to know how to respond in such cases in a suitable way (Kass, 2012; Ueda, 2018). At times, these learners may feel embarrassed, especially when they reach their adolescent years and realise that they are not able to demonstrate socially expected norms optimally (Schinazi, 2007). They may feel uncomfortable and self-conscious, and as a result withdraw socially or even become defiant (Schinazi, 2007). In response, teachers and parents need to support these learners by, for example, teaching them how to deal with negative emotions by becoming aware of their feelings and what aggravates them, monitoring negative emotions and responding in suitable ways when being aggravated (Kass, 2012).

Finally, learners with visual impairment may experience difficulty in accepting their disability. They may, for example, experience their disability as unfair and in this way prevent themselves from fully embracing life (Ueda, 2018). Furthermore, learners with visual impairment may be easily frustrated, particularly when they fail scholastically or in mastering important skills. If learners struggle with the skill of regulating their emotions or dealing with their frustrations, they may require professional support to accept their disability, identify negative feelings and develop coping mechanisms to deal with and express these in a suitable way (Kumar & Signh, 2013).

2.2.6 School provision for learners with visual impairment in South Africa

The provision of equal educational opportunities in South Africa has been problematic for many years (Habulezi & Phasha, 2012; Terzi, 2005). Apart from limited access to education due to ability and racial differences during the apartheid years, support and schooling for learners with disabilities were generally neglected in the past (Berry, 2008). Many learners have been kept out of school because they do not meet certain

scholastic standards or are differently abled (Habulezi & Phasha, 2012). Although amends have since been made to accept all learners in schools regardless of their (dis)ability, some schools remain reluctant to follow this route (Department of Education, 2005a). This reluctance may be ascribed to a number of reasons, such as a shortage of specialised or trained teachers and other staff members, or the absence of specialised facilities.

In South Africa, different types of government funded schools exist, which differ in terms of the levels of support provided to learners who may have special needs. The first category of schools is mainstream schools – also referred to as public ordinary schools. These schools generally provide education for developing learners, with the level of individual support being low to moderate, focusing on activities such as differentiation during lessons to cater for different learning styles (Department of Basic Education, 2001; Ferguson, 2014). However, these schools cannot exclude learners with special needs who want to enrol. Next, full service schools, also known as inclusive schools, have the aim to accommodate all learners in an inclusive setting (Department of Basic Education, 2001). The level of support in these schools ranges from moderate to high as they are supposed to be equipped with specialised support staff, such as remedial and special needs teachers, even though this is not always the case in reality. The physical infrastructure at these schools is also expected to be suitable for learners with special needs (Department of Basic Education, 2010).

Finally, special needs schools, often referred to as resource centres, generally admit and accommodate learners with intellectual and sensory disabilities (KwaZulu Natal Department of Education [KZNDoe] & MIET Africa, 2010). The level of specialised support provided at these schools is high as specialists, such as psychologists and other therapists are available at the school. As a result, specialised support is provided on-site. Full service schools can also request assistance from these schools (KZNDoe & MIET Africa, 2010).

According to the EMIS report (Department of Basic Education, 2016), 29 749 public and independent schools existed in South Africa in 2016, with 25 574 being mainstream schools and 4 175 other educational organisations, such as Early Childhood Development centres (ECD) and special needs schools. As such, public mainstream schools accounted for 92%, independent schools for 4,4%, ECD centres

for 1,9% and special needs schools for 0,9% (Department of Basic Education, 2016), highlighting the shortage of special needs schools in South Africa. More specifically, in South Africa a mere 715 designated full service schools and 464 special needs schools currently exist, of which only 22 are for the visually impaired across all nine provinces of the country (Department of Basic Education, 2016).

The above-mentioned total number of schools in the country are served by 440 151 teachers (Department of Basic Education, 2016). Some of these teachers have been exposed to an extent to the implementation of inclusive education policy, yet others have not. In addition to the need for specific training on differentiation of the curriculum, many teachers have not yet received any general training on working with learners with visual impairment or for that matter, other disabilities (Busemeyer & Vossiek, 2015).

As a result, the Department of Basic Education is focused on equipping schools and teachers to support all learners in all schools in the country equally. In terms of infrastructure, the government is, for example, maintaining existing structures yet also establishing new structures in schools that may assist learners and teachers, more specifically learners that are physically disabled (Gibberd, 2007; Department of Basic Education, 2001). Admission requirements have been revised to accommodate all learners in all schools, including those with special needs, and teachers receive basic training on how to support learners with special needs and disabilities (Weber, 2008). All these attempts are driven by national policy statements, such as the Constitution of the Republic of South Africa (1996), the South African Schools Act (1996) and the Higher Education Act (1997), to mention but a few.

In a study by Swart, Engelbrecht, Eloff, Pettipher and Oswald (2004) focusing on learners who are disabled and attend mainstream schools in an urban area in South Africa, parents stated that their choice of school depends on a child not being judged but rather feeling comfortable and accommodated in the school of placement. Lack of knowledge by the parent population about inclusive education or inclusive schools may contribute to their enrolling their children in specific schools (Swart et al., 2004). As the number of schools that specifically focus on learners with disabilities is limited in South Africa, the waiting lists are generally very long, resulting in some learners ending up at educational institutions where their specialised needs are not met, be this

due to limited available resources, teachers not being well-equipped or other related reasons (Department of Basic Education, 2001). In cases where these learners are enrolled in mainstream schools, they may face the common challenge of limited resources and, if assistance is available, it may tire the learners as this will typically require of them to put in much effort for the assistance to have an impact (Swart et al., 2004).

2.2.7 School-based support for learners with visual impairment

As indicated earlier (Consult Section 2.2.5), learners with visual impairment require ongoing support on multiple levels in the classroom. In addition to support on a scholastic and practical level, for example large print and Braille documents, these learners need to be supported on social and emotional levels (Lane, Wellman, Olson, LaBounty & Kerr, 2010) More specifically, learners with visual impairment may feel lonely, struggle to be accepted, need to compete with sighted learners, or feel pressurised by their school work and related demands (Verdier, 2016). As such, constructive feedback from people in the school environment – both peers and teachers – positive attitudes and easy access to the physical environment are important to attend to in the schools and classrooms where learners with visual impairment are accommodated (Roe, 2008).

Professionals such as occupational therapists, speech therapists and optometrists can make a positive contribution to the implementation of an inclusive education policy. As most of these professionals in South Africa operate on a private practice basis or in hospital settings, these services may not be easily accessible to all learners and their families due to long distances to places offering the services, or such services being too expensive to afford by a large percentage of the South African population, specifically those without medical aid. Some individual needs of learners can be met through consultation between parents and these professionals, or when professionals work closely with the teachers of learners with visual impairment, providing them with strategies on how to support the learners (Department of Basic Education, 2010).

Australia serves as an example in terms of general school-based support, where set standards for accommodating learners with visual impairment were established in 2005 (Brown, Packer & Passmore, 2013). Among others, these include teacher

training and experience, teacher support, parent involvement, adult involvement, and maintaining an inclusive attitude. The main purpose of these standards is to ensure that everything required to support the enrolment and participation of learners that are disabled in general schools are in place. Such standards can ensure that learners with disabilities have access to the curriculum in support of their learning and development (Brown et al., 2013). In applying this idea to the South African context, the limited training of teachers, limited involvement of parents and poor support by external stakeholders pose distinct challenges.

Closely related, under-resourcing inevitably prevents schools from optimally accommodating learners with disabilities. In this regard, the need for specialised classroom technology for learners with disabilities remains prevalent in South African schools. According to Bayram et al. (2015) who conducted a study on inclusion in Mathematics classrooms with high school learners with visual impairment, these learners often require access to programmes such as Job Action with Speech (JAWS) to be able to use computers. Learners who participated in the study noted that they themselves mostly had to buy their writing materials and other assistive devices, implying a financial burden for them and their families (Bayram et al., 2015).

Currently, teachers at special needs schools often focus on teaching learners Braille and conduct summative assessment by using Braille. This holds the advantage of learners being able to use Braille in support of their learning (Kamal, 2017). Other than Braille, some assistive devices are used in selected privileged special needs schools, yet not in all schools, thereby exposing only some learners to these devices (Lamichhane, 2017), which include apex, computers with large screens, and embossers and Braille printers, among other resources (UNESCO, 2001).

In class, teachers typically provide support on a practical level by rearranging classroom furniture to allow learners with visual impairment to move around freely, seating learners with visual impairment in front or in a position where they can see better, or by adjusting the classroom lighting (Lamichhane, 2017). Some other accommodations involve teachers verbally teaching and assessing learners with visual impairment rather than giving them written work, thereby adapting their teaching and assessment practices (Kamal, 2017; Lamichhane, 2017). Teachers can

furthermore create special material, such as counters in Braille to accommodate learners with visual impairment and make the curriculum accessible to them.

Outside the classroom setting, some schools in South Africa have flattened the school grounds and/or built ramps to prevent learners with visual impairment from falling or struggling to use staircases (Kamal, 2017). Significant signage and warning signs are typically added in colour, for example yellow that suits learners with low vision. Common areas such as bathrooms, transport stations, libraries and computer centres are usually adapted in a way that can support learners with visual impairment (Niyisabwa, 2016; UNESCO, 2004). For learners who conduct experiments in school laboratories, an interfacing of equipment with large computer screens or verbalising text may be used (Waterfield & West, 2008). All such adaptations can be supported when an on-site occupational therapist is available to orientate learners and intervene in relevant ways.

As already indicated, the teaching and supporting of learners with visual impairment requires a holistic team approach (Johnson-Jones, 2017). More specifically, the teacher and school community cannot efficiently teach and support these learners on their own, and require the support of others. Therefore, parents, caregivers and other community stakeholders such as health departments, social workers and child protection units need to be involved, to mention but a few (Department of Basic Education & MIET Africa, 2010). The involvement of such professional can ensure that learners' right to quality education can be met and that they are supported in a manner that may enable them to participate optimally in their own learning activities and to be accepted in the school environment (Department of Education, 2007). In the case of the parents, they can offer therapeutic activities at home and provide continued support to learners with visual impairment (Department of Education, 2007).

In the South African context, teams that deal with learner support and special needs education are compiled in the school system. These teams are referred to as School-based Support Teams (SBST) and their major function is to identify, assess, provide support or refer learners with special needs to external service providers (Department of Basic Education, 2001; Masango, 2013). These teams are also meant to support teachers who work with learners with special needs or experience challenges in doing so. In cases where a learner requires special support, the SBST at the school, in

collaboration with the referring teacher, draws up an individual support plan (ISP), stipulating relevant support strategies that may assist the learner in accessing the curriculum and optimally participating in any learning activities (Department of Basic Education, 2015). Ad hoc members, such as remedial teachers from other schools, social workers and retired teachers can be invited for contributions on how to support learners with specific special needs (Masango, 2013).

As SBSTs generally provide support to both teachers and learners in the school context, only the cases that cannot be resolved and efficiently supported through this structure are referred to a District-based Support Team (DBST) that will then provide support to the learner through the SBST and monitor the progress (Department of Education, 2005b). The DBST consists of specialists such as psychologists, occupational and speech therapists, learning support advisors, subject advisors, as well as officials from procurement and finance sectors, to mention but a few. These teams thus involve various sections and fields of potential support in the district, with relevant role players becoming involved according to the specific referral (Department of Education, 2005b). After referral of a learner to the DBST, the learner is assessed by relevant specialists (psychologist, occupational therapist and/or speech therapist) depending on the referral. An intervention plan is then developed, indicating the responsible people for the implementation of the plan (Department of Basic Education, 2001).

Such a support process is always carried out in collaboration with the referring teacher, the SBST coordinator, the learner's parents who need to provide their consent for the referral, assessment and intervention, and with members of the DBST. In cases where the intervention requires a subject advisor to guide the teacher on how to present a particular subject to the referred learner, the advisor also provides strategies on which skills to develop and on curriculum differentiation in support of learner performance (Department of Basic Education, 2001; Ferguson, 2014). As part of such a team, the responsibility of procurement and financial officials is to ensure that learners who require, for example, assistive devices are supplied with these. For this task, private suppliers of such devices or the Department of Health may also become involved. If a learner still does not progress as expected despite all such support efforts, referral is made to a relevant special needs school (Department of Education, 2007).

2.3 INCLUSIVE EDUCATION AS BACKDROP TO SUPPORTING LEARNERS WITH VISUAL IMPAIRMENT

In this section I discuss inclusive education in terms of the underlying principles and implied benefits of the phenomenon as well as the challenges associated with the implementation of inclusive education policy, more specifically in South Africa. In contextualising my discussion I refer to international as well as local trends.

2.3.1 Underlying principles and benefits of inclusive education

Inclusive education is based on the idea that all schools are able to accommodate all learners despite their adversity or style of learning (Landsberg et al., 2015). As such, an inclusive education policy focuses on “accommodating diversity of learning needs and learners who are excluded from the process of learning” (Department of Basic Education, 2001, p. 11). Accordingly, although learners may learn differently and at a different pace, it is believed that all learners can learn, even though some may require additional support. As inclusive education acknowledges and respects learner diversity, the policy is rooted in the protection of human rights and the promotion of social justice and equity (Coetzee, 2016).

It follows that inclusive education is not discriminatory and extends the provision of quality education to all learners. It implies the teaching of learners from different cultural backgrounds, regardless of (dis)ability, with the aim of expanding educational opportunities, and contributing to healthy emotional and social development as well as interaction between learners and also the stakeholders involved in supporting the learning and development of learners (Terpstra & Tamura, 2008). This implies a collaborative, preventative and intervention approach where the roles of both teachers and parents are valued and respected (Department of Basic Education, 2001) by adopting a holistic approach to learning and development.

An important implication of inclusive education policy is that each and every child has access to education regardless of background, and that young people who have left school are able to return to school if they wish to do so. In this way, the development and extension of learners’ participation can be promoted and may motivate them to reach their full potential. It follows that inclusive education policy attempts to change attitudes in the teaching and learning arena, adopting a learner-centred approach and

ensuring that the curriculum is differentiated for every learner to have access to it (KZNDoe & MIET Africa, 2010). Despite the possibility of stigma and stereotypes in society when a learner faces challenges or is sick, inclusive education policy thus aims not to discriminate against such a learner, but rather to provide him or her with quality education that is equal for all learners (Coetzee, 2016). As such, inclusive education values learners and their diversity, concerns the sharing of teaching and learning responsibility, and may subsequently provide learners with a sense of belonging (Swart et al., 2004).

Full service schools or inclusive schools form an important part of the implementation of inclusive education policy in South Africa owing to the principle of accepting all learners despite learning style differences and barriers to learning. As mentioned earlier, full service schools were introduced in South Africa in 2001 when White Paper 6 on special needs education (Department of Basic Education, 2001) was put into practice. These schools are intended to offer quality education by accommodating various learning needs while endeavouring to provide access, equality and social justice in education (Department of Basic Education, 2010), thereby supporting inclusive education's enabling approach to the schooling system.

As already alluded to, due to the implied collaborative approach, inclusive education involves various role-players, such as teachers, parents and other significant stakeholders when supporting learners with special needs (Department of Basic Education, 2001). However, parents should arguably be the primary stakeholders in the support of sustainability (Beveridge, 2013). More specifically, if parents and other stakeholders take ownership of the inclusive process, they may, in addition, be assured that their children are welcome in the school community regardless of any barriers and differences they may face (Beveridge, 2013).

As such, inclusive education takes into consideration that the school where a learner with special needs is enrolled may not necessarily be able to provide individual support, implying the need for other stakeholders to become involved (Mortimore & Zsolnai, 2015). The establishment of working partnerships and consultation for the sake of assisting and supporting learners is thus important. Furthermore, inclusive education implies the social integration of all learners, thereby reducing the possibility of stigma against any type of disability and ensuring that every learner can participate

in the community and all aspects of life without being judged or discriminated against (KZNDoE & MIET Africa, 2010).

2.3.2 International trends in the field of inclusive education

In 1994, in Salamanca Spain, 94 countries were represented by government officials and stakeholders from various organisations, such as the United Nations and specialised agencies that met to discuss ways of making education accessible to all. During this gathering, the Salamanca statement that recognises the importance of including all learners in school while accommodating their needs and celebrating their differences was released (UNESCO, 1994). This conference and the Salamanca statement resulted in 94 governments, including South Africa and 25 international organisations committing to put strategies in place in support of all learners being able to learn efficiently and not being disadvantaged due to disability. The Salamanca statement furthermore urges all participants in a child's life to be fully involved in the child's learning, growth and development (UNESCO, 1994). Following the Salamanca statement, various implementation attempts have occurred, yet the transition from a medical model viewing disability as a condition that requires specific treatment to an inclusive one has been slower than expected.

In Wales, Scotland and England, every school has been provided with the so-called Index for inclusion in attempting to implement inclusive education (Booth & Ainscow, 2004). This requires of schools to judge their own inclusivity and prioritise the process of inclusion. Accordingly, schools are required to avoid any form of discrimination against learners with disabilities, and admit and facilitate optimal learning in educational institutions (Rieser, 2008).

In an article on the United Nations Convention on the Rights of People with Disabilities (UNCRPD) (Cole, 2012), it was proposed that people with disabilities be treated in a non-judgemental and non-discriminatory manner. In ensuring this, specifically for learners, the UNCRPD emphasises that no child can be denied primary education due to, for example, a disability (Cole, 2012). When being included, learners can be accommodated in accordance with their needs, thereby supporting all aspects of their development (Rieser, 2008).

In the United States of America (USA), the inclusion of learners has stood the test of time in the sense that policy frameworks that eventually led to inclusive education legislation were first initiated. These include the Education for All Handicapped Children Act (EAHCA) in 1975 that was retitled the Individuals with Disabilities Education Act (IDEA) in 1990 and focuses on teaching and supporting all learners in the school system (Grynova & Kalinichenko, 2018). At present, the USA practises inclusion by, for example, developing Individual Support Plans for learners, working in teams to support learners with special needs, and applying relevant accommodation and adaptation procedures (Grynova & Kalinichenko, 2018). In Canada, inclusive education has similarly been implemented by restructuring school environments to accommodate learners with disabilities and by involving parents as equivalent contributors to learners' learning and development (Grynova & Kalinichenko, 2018).

In a study conducted by Soriano, Watkins and Ebersold (2017) in 30 European countries, it was found that most countries perceive inclusive education as the fulfilment of the fundamental human rights for all children, with or without disabilities. Most of the countries that participated in the study believe that the quality of education needs to be improved and that more learners need to obtain access to education in facilities suitable to them. Inclusive education is seen as a way of achieving this (Soriano et al., 2017).

Meeting diverse learning needs seems to be the priority of inclusive education in most of the European countries (Soriano et al., 2017). Furthermore, in Europe, a multi-stakeholder approach to inclusive education has been adopted to best serve and include all learners. This approach seems to assist with learners receiving support from different but relevant stakeholders, with this in turn promoting context-based support for all learners, particularly those with disabilities (Busemeyer & Vossiek, 2015). Additionally, inclusive education seems to be a suitable pathway to build capacity among teachers who work with learners with special needs. This possibility implies that in-service training is required in addition to prospective teachers receiving formal training on the theory and practice of inclusive education (Busemeyer & Vossiek, 2015).

In India it is reported that 80% of the population residing in rural areas have no access to special needs schools, thereby often leaving children with disabilities out of school,

which poses a challenge in terms of inclusion (Kalyanpur, 2008). An additional challenge experienced in India in implementing inclusive education, besides teachers' limited experience in working with children with disabilities, relates to the shortage of qualified teachers and support staff members, such as teacher assistants (Das & Kuyini, 2013). Furthermore, parents are perceived to be resistant in enrolling their children in special needs schools supporting learning due to their not being involved in decision making processes (Bach, 2009 as cited in Alur & Timmons, 2009).

Moving closer, one third of the 67 million of children with disabilities are said to reside in South Asia and Sub-Saharan Africa (UNESCO, 2009). However, in Pakistan the majority of children with disabilities are reported not be enrolled in schools because of the shortage of special needs schools (Khan, Hashmi & Khanum, 2017). In this region, 54 teachers from twelve full service primary schools in Islamabad participated in a study that focused on the perceptions of primary school teachers of inclusive education. Participating teachers valued inclusive education as a practice and desired every learner to be included in a regular classroom and receive quality education; however, 52% voiced the opinion that such practice is not possible due to the difficulty of teaching and supporting learners with disabilities in one class (Khan et al., 2017).

In countries that are still developing, such as Uganda, opportunities have been opened up for children who are of school-going age but have not attended school in the past. To this end, amends have been made to ensure that the diverse needs of these learners are met by enrolling them in schools for free primary education (Budget Monitoring and Accountability Unit [BMAU], 2018). In support of this initiative, children with disabilities were prioritised for enrolment, in addition to a focus on adaptation of the curriculum at some levels (BMAU, 2018). Other poor countries such as Lesotho have reportedly also prioritised inclusive education, as is evident in the establishment of the Lesotho Special Education Unit in 1991 (Mosia, 2014) with the mandate of piloting inclusive education by training itinerant personnel in supporting education in six of the ten districts of the country (Mosia, 2014). To this end, two higher education qualifications have subsequently been developed in special needs education, a diploma and a degree in promotion of inclusive education in Lesotho (Mosia, 2014; Urwick & Elliott, 2010).

Despite constant efforts to promote inclusive education worldwide, some regions in the world did not initially consider education as a basic human right, such as Zanzibar, where the education system favoured Europeans and Asians yet deprived Africans of equal education opportunities (Juma, 2018). Six months into the 1964 revolution, education was recognised as a human right in Zanzibar (Juma, 2018). In this region, inclusive education was formally introduced only in 2005 although the integration of learners with disabilities was already initiated in 1991 (Juma, 2018). To this end, inclusive education in Zanzibar has since entailed a collaborative effort involving government departments and international development acquaintances (Juma & Lehtomäki, 2016). Several policies and legislation have subsequently been formulated to facilitate the implementation of inclusive education and two teacher training institutions that focus on the training of teachers in inclusive education were first initiated (Juma & Lehtomäki, 2016).

2.3.3 Implementation of inclusive education in South Africa

Efforts to implement inclusive education in South Africa commenced years before White Paper 6 on special needs education was released in 2001 (Lomofsky & Lazarus, 2010). The necessity of this paradigm shift was emphasised by the fact that children with disabilities had limited access to ordinary schools in the past, while others were marginalised and often referred to schools that could work with them only (Ngwena & Pretorius, 2012). More specifically, before 1994, learners with disabilities struggled to get admitted to ordinary schools (Khumalo & Hodgson, 2017 as cited in Thom, Veriava & Hodgson, 2017), thereby denying quality education to many learners with disabilities, placing them in a position of inadequacy with no or limited educational support (Steenkamp, 2012). Learners with disabilities at that stage often had to endure labelling and were forced to adjust to the system, being marginalised due to segregation in the country's schooling system (Pather, 2011).

The idea of providing all learners with quality education in the proximity of their homes became more prominent as a result of the Salamanca statement and commitment made by the South African government to move towards Education For All (EFA) in 1994 (UNESCO, 1994). Following the formal introduction of inclusive education policy in 2001, the South African school curriculum was transformed to provide all learners, as per their constitutional right, with access to quality education. The National

Qualifications Framework (NQF) was tasked to develop a curriculum that would accommodate learners with disabilities, with special needs schools being suggested as another avenue for these learners. However, this suggestion seemed to promote segregation and limit the choices of schools for certain learners.

As part of inclusive education policy implementation, full service schools were initiated in South Africa in 2001 (Department of Basic Education, 2010), as explained earlier. These schools are supposed to be well-resourced and supportive by following a holistic and flexible approach, and engaging with the necessary stakeholders to build and sustain partnerships that may benefit all learners (Department of Basic Education, 2010). The idea is to empower learners, especially those with disabilities, to interact and “integrate into the broader community” (Brydges & Mkandawire, 2016, p. 218), by supporting learners in terms of their specific learning needs (Conway, 2017). Full service schools are furthermore regarded as the advocates of the Screening, Identification, Assessment and Support (SIAS) processes provided in South Africa. Other schools are supposed to learn from these schools. Despite several efforts of implementation, teachers at many full service schools are still being trained on how to implement the SIAS process and inclusive education policy to disseminate knowledge on this process to other schools (Department of Basic Education, 2001).

Training in the implementation of inclusive education policy in South Africa has in the past often been left to administrators that may find it difficult to train teachers because of their own limited understanding of the policy. This has resulted in a general feeling of uncertainty in teachers about the implementation (Khumalo & Hodgson, 2017 as cited in Thom et al., 2017). It follows that some fundamental transformation is required and that a shift should take place among teachers from being aware of the theory on inclusive education to practically implementing the policy (Donohue & Bornman, 2014). Furthermore, for the school system to become more flexible, accommodative and responsive, and to be able to meet the diverse needs of all learners, a variety of resources and services are required at all schools, which at this point in time in South Africa remains to be a problem (Donohue & Bornman, 2014).

More specifically, in addition to teachers not feeling sufficiently equipped and self-confident to implement inclusive education policy, limited resources in the South African school context have affected the successful implementation of the policy. In a

study by Eloff and Kgwete (2007), only three schools out of 12 that were selected by the national Department of Education in the rural Mpumalanga region, South Africa were actively involved in a pilot phase of becoming full service schools. In this particular study, teachers identified three main challenges hindering the implementation of inclusive education, namely “lack of skills and competence; large classes and insufficient resources” (Eloff & Kgwete, 2007, p. 353).

Although support is presumably provided, though infrequently, to teachers of pilot schools in most provinces in the country (Consult Section 2.3.4) by the national Department of Education’s district officials (Shanda, Kelly & McKenzie, 2018), the mentioned hindrances may prevent schools from progressing as intended. Findings such as these underscore the need for ongoing training and suitable qualifications, as the one being developed as part of the broader research project that my study forms part of, which may support teachers in implementing inclusive education policy (Shanda et al., 2018).

2.3.3.1 Inclusive education and children’s rights

As already indicated, White Paper 6 on special needs education (2001) is regarded as the cornerstone of inclusive education in South Africa. According to this policy, all children can learn although some may need more support than others. As such, children are to be admitted to any school within the demographic stipulations of school enrolment of the country, regardless of any discrepancy in age, race, gender, disability and background (Department of Basic Education, 2001; Landsberg et al., 2015; Malak, 2013). As referred to earlier, inclusive education policy thus allows all learners with a chance to be placed in a formal school setting, interact with their peers and receive quality education, as per their constitutional right.

In a democratic South Africa, the Children’s Act (Act No. 38 of 2005) provides guidance on how children can be supported in terms of their freedom, dignity and equality (Eckman, 1993; LeadSA, 2013). In line with inclusive education policy, this act forbids harmful conduct against children and requires that children be treated properly and fairly (Eckman, 1993; LeadSA, 2013). The act stipulates the responsibility of parents/caregivers in ensuring that the rights of children are respected. The act regards children as a vulnerable group of people in South Africa (Statistics South Africa, 2012), especially those who have lost both their parents through death (Statistic

South Africa, 2012), those whose parents are infected by HIV and AIDS (Duvenhage, 2009), those who are infected and affected by HIV and AIDS themselves, those who live in child-headed households, those who are exposed to poverty and lack basic services (Cannon & Snyder, 2013), and those who are abused (Statistics South Africa, 2012). When support is provided to such learners, teachers can benefit from knowledge on how to work with learners from different households and contexts of vulnerability (Vaz, Wilson, Falkmer, Sim, Scott, Cordier & Falkmer, 2015).

One implication of the South African Children's Act (Act No. 38 of 2005) is that resources for the provision of quality education, the socio-economic needs of children and basic healthcare are foregrounded, and that equality and fairness apply at all times. The act furthermore instils a belief into each and every child's ability to reach his or her full potential, while adults fulfil a supportive role in children's learning, growth and development (Thabe, 2015). As an important aim of the Children's Act is to ensure that children's voices are heard and that no discrimination against them takes place, the act focuses on promoting children's wellbeing and supporting their growth and development (Abrahams & Matthews, 2011). Broadly speaking, the Children's Act (Abrahams & Matthews, 2011) serves as a measure to make people aware of children's development in a holistic way, in other words that children function, grow and learn at home, at school and in the community, in both formal and informal settings (Department of Basic Education, 2001).

In addition, the South African Bill of Rights for All Children with Visual Impairment and their Families (Association for the Education and Rehabilitation of the Blind [AER] and Visually Impaired & Council of Schools and Services for the Blind [COSB], 2019) supports the provision for and protection of the rights of children with visual impairment. This bill promotes access of these learners to vision evaluations and early intervention by qualified specialists as well as the provision of educational support in terms of Individual Support Plans (ISPs) that promote inclusion, learning and development (AER & COSB, 2019). The bill furthermore alludes to the fact that parents of children with visual impairment need to be informed of their children's diagnosis and the associated required intervention (AER & COSB, 2019). Finally, children with visual impairment have the right to accessible school settings, learning material and relevant transition intervention procedures (AER & COSB, 2019).

2.3.3.2 Progress with policy implementation

Since 2001, when White Paper 6 on special needs education (Department of Basic Education, 2001) was introduced, several guidelines have been formulated to ensure the successful implementation of this policy. These include the Guidelines to Ensure Quality Education and Support in Special Schools and Special School Resource Centres (Department of Education, 2007), which aim to provide guidelines for special schools for effective functioning and the provision of relevant support in the form of quality education; the National Strategy on Screening, Identification, Assessment and Support (SIAS) (Department of Basic Education, 2014).

In striving for a standard strategy for identifying, assessing and supporting learners in South Africa, the Guidelines for full service/inclusive schools document (Department of Basic Education, 2010) provide guidelines on how to operate and provide quality education for ordinary schools earmarked as full service schools. Other guideline documents include the Guidelines for Inclusive Teaching and Learning (Department of Basic Education, 2010), which strive to make classrooms accessible and conducive for all learners; and the Guidelines for responding to learner diversity in the classroom through curriculum and assessment policy statements (Department of Basic Education, 2001), which aim to “provide teachers, principals, subject advisors, administrators, school governors and other personnel, parameters and strategies on how to respond to learner diversity in the classrooms” (Department of Basic Education, 2001, p. 2). Finally, the National Development Plan (NDP, 2012) strives to eradicate poverty and lessen inequity in South Africa.

In addition to these guideline documents, a committee that has representation from all provinces, the office of the State President’s disability desk and teachers’ unions was compiled to oversee the progress of inclusive education policy implementation. The committee meets at least once every six weeks (Murungi, 2015), and has distributed the above-mentioned guidelines to all provinces as part of its responsibilities. District officials have been training teachers on the guidelines for implementation and some schools have commenced with implementation (Liebenberg, 2010).

Furthermore, the implementation of Education White Paper 6 on special needs education (Department of Basic Education, 2001) has resulted in some ordinary schools in all nine provinces of South Africa being identified to be converted to full

service schools to enable admission, registration and provision of quality education to all learners in spite of their background. According to the Guidelines for full service/inclusive schools, full service schools are “first and foremost mainstream education institutions that provide quality education to all learners by supplying the full range of learning needs in an equitable manner” (Department of Basic Education, 2010, p. 7). As indicated earlier, only 715 full service schools have been established at this stage (Department of Basic Education, 2016) and are functioning in South Africa. It follows that the progress with implementation of inclusive education policy has been slower than expected. It should, however, be kept in mind that implementation of the policy is not a once-off action but rather a progressive process (Donohue & Bornman, 2014).

2.3.3.3 Teachers’ levels of readiness to implement an inclusive education policy in South Africa

It is generally accepted that the implementation of an inclusive education policy can change attitudes in terms of how people view the education system. Attitudes, especially those of teachers, play an important role in the manner in which learners learn and on the practice of inclusive teaching (Malak, 2013). To this end, Mdikana, Ntshangase and Mayekiso (2007) conducted a study on teacher attitudes to inclusive education and working with learners with special educational needs. These authors (Mdikana et al., 2007) indicate that teachers are often hesitant to work with learners who are intellectually challenged or have a disability, not because they do not want to engage with these learners but because they do not know how to work with them. This apparent lack of sufficient confidence is intensified by teachers generally having limited training or the necessary resources to work with learners with disabilities (Lamichhane, 2017; Malak, 2013).

Many practising teachers in South Africa are seemingly not sufficiently trained to implement inclusive education policy or teach learners with special needs, such as those who are visually impaired (Ntombela, 2011). This may lead to teachers referring learners to special needs schools rather than accommodating them in mainstream classrooms. To this end, teachers may believe that learners with, for example, visual impairment will receive better quality education when taught by teachers who hold qualifications and who are experienced in special needs education, as some of them

may feel inadequately trained and lack the necessary understanding of what inclusive education entails (Ntombela, 2011). Therefore, the provision of “disability-specific” knowledge and training is deemed important (Lamichhane, 2017, p. 12).

In a study conducted with teachers of three low resourced schools in Tshwane, South Africa, teachers viewed the implementation of inclusive education as slowed down by the training of teachers, an appropriate curriculum and proper classroom structure for learners with special educational needs (Nel, Tlale, Engelbrecht & Nel, 2016). In addition to these challenges negatively affecting the implementation of inclusive education policy, teacher participants mentioned the lack of parent support as well as the increased administrative workload for teachers when referring learners to District-based Support Teams (DBST) (Nel et al., 2016) as a negative influence. In terms of parental support, participating teachers indicated that parents do not always turn up for meetings regardless of the efforts to get them there. In addition, those who attend the meetings are often illiterate and may not comprehend what is expected of them when assisting the learners at home (Nel et al., 2016). When requiring support from the DBST, teachers are seemingly concerned about the number of forms they need to complete when referring learners as well as the response time of the DBST (Nel et al., 2016). These factors, among others, currently seem to hinder the successful implementation of an inclusive education policy in South Africa.

For teachers receiving in-service training, exposure to working with learners with disabilities will provide an opportunity to practise what they are being taught, providing them with relevant experience while building confidence (Malak, 2013). In a study conducted by Botha and Reddy (2011), it was found that teachers can benefit from in-service training, as they acquire new skills from experienced teachers that are referred to as mentor teachers. Although some skills in the teaching profession can be learned through experience, these authors (Botha & Reddy, 2011) posit that it is helpful to have an experienced teacher who is able to guide others and teach them skills.

As new teachers often experience difficulty in transferring theory into practice, assistance by mentors can be of assistance (Botha & Reddy, 2011) through, for example, in-service training sessions. Even though in-service training activities have been offered in the different provinces of South Africa since 2001, teachers may prefer formal training that provides them with a professional qualification. Against this

background it is important to keep in mind that teachers and other staff members working with learners with special needs in the inclusive education system, may not necessarily have received sufficient pre-service training in the field, and may lack the required practical knowledge and confidence to address the needs of all learners in the classroom. This need for thorough and continued training may contribute to the delayed implementation of inclusive education policy in South Africa (Khumalo & Hodgson, 2017 as cited in Thom et al., 2017).

Another challenge may arise when teachers of learners with visual impairment are, for example, required to use assistive devices (Brown et al., 2013) yet are not trained to do this. As such, inclusive education policy implementation does not only require differentiation in terms of the curriculum, but also asks for specialised training of teachers for them to know how to adjust their teaching strategies and accommodate learners with special needs in class (Department of Basic Education, 2001; Lamichhane, 2017).

Current undergraduate teacher training programmes in South Africa include specific modules or sections of modules on the theory of inclusive education, yet not necessarily on the practical implementation thereof (Brown et al., 2013). A formal qualification in inclusive education is offered by only one tertiary institution in the country that may not be accessible for all teachers. As indicated earlier, in an attempt to address this need, the South African Department of Basic Education has been facilitating workshops with practising teachers on inclusive education since 2001, focusing on the policy, its implications, and changes required for practical classroom teaching (Department of Basic Education, 2001). However, these workshops do not lead to a formal qualification, and may once again merely entail a general overview of inclusive education policy instead of specialised knowledge and practical skills (Roe, 2008).

With regard to the inclusion of learners with visual impairment, no formal qualification is currently offered in South Africa. Against this background, the postgraduate qualification that has been developed as part of the broader project that my study forms part of can address this need for focused training in the field.

2.3.3.4 Additional challenges in implementing inclusive education policy

As indicated in the previous section, a prominent challenge associated with the implementation of inclusive education policy involves teachers and other staff members' attitudes, uncertainty and fear of working with learners with disabilities (Das & Kuyini, 2013). More specifically, inclusion requires of teachers to walk the extra mile, not only supporting learners in a specialised way in the classroom but also providing additional attention and input after school hours and for extra-curricular activities. Many teachers seem uncertain and hesitant to fulfil such a role as they may feel incompetent to perform the duties required by policy implementation. Although training and workshops are presented, teachers who graduated before or during the 1990s may feel that, as they did not receive any formal training on inclusive education policy, they cannot sufficiently implement the policy. Walton (2010) supports this idea by stating that, subsequent to inclusive education policy implementation, school communities, including those that have been converted into full service schools, still do not have sufficient expertise and the required resources to enrol learners with diverse needs.

Teachers may furthermore perceive inclusive education as creating additional work for them due to, for example, additional paperwork, such as referral forms for learners who require support. In a study by Malak (2013), teachers complained about the workload that learners with disabilities implies, due to the need for additional support and some of the learners being ill-mannered, as well as the implied additional work when planning lessons, developing instructional media, doing marking activities, during tests and in maintaining a well-disciplined classroom. Teachers indicated that they found it difficult to engage effectively with learners with disabilities because of limited time and resources, and that they believed that more skilled "disability-specific" teachers could be employed (Lamichhane, 2017, p. 12).

In this regard, teachers generally perceive their workload to be increasing, with time being limited to meet all the curriculum specifications and setting time aside for individual support to learners with visual impairment and collaboration with other teachers (Brown & Beamish, 2012). In the light of this, if there is limited buy-in and collaboration among teachers, principals and School Governing Bodies, it will be

difficult for learners to receive the intended quality education and for parents to support the idea of inclusive education.

This highlights the importance of the principals of full service schools in supporting policy implementation and possessing the relevant skills to lead and oversee the establishment of inclusive education practice in their schools. If schools are not sufficiently equipped and principals have limited ideas of what inclusive education entails, it may be difficult to head a full service school and encourage staff members to adjust by striving for inclusivity (Department of Basic Education, 2010). Principals, as heads of institutions, are bound to be advocates of inclusive education; hence they require adequate knowledge and skills on inclusive education so that they can effectively lead teachers and parents (Department of Basic Education, 2010).

Next, the schools in South Africa that have been identified to be converted into full service schools are ordinary schools with ordinary infrastructure. New and advanced infrastructure is typically required when planning to accommodate learners with disabilities, and may be costly. Buildings may, for example, need to be transformed to suit learners with physical disabilities, hearing and visual aids have to be available for learners with hearing and/or visual challenges, and learning and developmental material is required for all learners in the school. Such developments and additional specialised resources have distinct financial implications.

Another potential financial challenge relates to the employment of specialised staff members. As teachers may feel incompetent when working with diverse learners, the need for special needs teachers and specialists, such as educational psychologists and occupational therapists in the school environment remains. Even outside the classroom, professionals can facilitate activities on the playground and enhance learners' physical and social development.

Finally, another challenge to implement an inclusive education policy successfully in South Africa relates to over-crowdedness in many classrooms. In some schools the teacher-learner ratio can be up to 1:50 (Negash, 2017). Such classroom sizes may prevent teachers from reaching the learners who require additional support, thereby preventing the inclusion of some learners from taking place (Negash, 2017). As such,

this may in turn limit the identification of learners with visual impairment and of them receiving the relevant support and/or referrals (Lynch, Lund & Massah, 2014).

2.4 CONCEPTUAL FRAMEWORK OF THE STUDY

I integrated elements of the bio-ecological systems theory (Bronfenbrenner, 1990), communities of practice theory (Kerno, 2008) and the social model of disability (Anastasiou & Kauffman, 2013) in compiling a conceptual framework (Consult Figure 1.1 in Chapter 1). In this section, I discuss the main concepts and theories I relied on, and explain how I integrated these.

The introduction of inclusive education has brought with it the notion that systems outside the learner may need to be adapted in support of a learner's development and learning (Winkler, Modise & Dawber, 2004). Learners with visual impairment specifically rely on information they receive via their other senses and from the external environment and systems outside themselves (Winkler et al., 2004). As such, it is important that the education system and those who implement inclusive education policy remain mindful of the fact that learners do not exist and develop in isolation, and that the environment influences them while they also influence the environment.

2.4.1 Bio-ecological systems theory

The bio-ecological systems theory (Bronfenbrenner, 1990) foregrounds four components for understanding the interaction between different systems that may affect the learner directly and/or indirectly, namely process, person, context and time (PPCT). In my study, I specifically relied on the context and process components, with context referring to the settings where the processes and influences take place (Krishnan, 2010), while process relates to proximal processes and comprises specific forms of relations that exist between individuals and their contexts (Bronfenbrenner & Morris, 1998). These components furthermore entail the interactions that occur in the micro-, meso-, exo- and macrosystems within various time frames and that may impact development (Tudge, Mokrova, Hatfield & Karnik, 2009). The systems define how a learner interacts with the environment and how this reciprocal relationship is carried out; in other words, how one system can affect others and in turn be affected by other systems.

The first structure, the microsystem, implies that any individual is a system that continuously interacts with the “immediate environment” such as family members, peers and the school (Landsberg et al., 2005, p. 10). Reciprocal influence and relationship building in the microsystem take place between systems that are found in the mesosystem (Landsberg et al., 2015; Lustig & Koester, 2013), where mutual modification of family, peers and school systems typically take place. Some learners may, however, not receive adequate support from their home environments, asking of teachers to provide such support. In the case of a learner who does not perform well at school, the family is generally expected to assist at home. Interaction with peers is similarly deemed crucial in the mesosystem (Losardo & Notari-Syverson, 2001).

In the exosystem a learner is not necessarily directly involved in the included systems, such as neighbours, health care services and welfare services, to mention but a few (Donald, Lazarus & Lolwana, 2002). Despite this situation of no direct involvement, these systems have an influence on the learner’s life; the learner may in turn have an influence on the systems. As such, any relationships that occur outside a learner’s proximity can affect the learner. For instance, poor provision of health care services may have an impact if a learner has to be attended to at a public health facility.

The fourth structure of the bio-ecological systems theory involves the macrosystem (Woo, 2005). In this system the learner’s development is influenced by beliefs, attitudes and values that may be embedded in a particular culture and/or society. All the interactions and influences that take place in different systems are said to occur in the chronosystem where different time frames are involved and interaction among systems occur progressively throughout the phases of child development (Landsberg et al., 2015).

2.4.2 Communities of practice theory

Communities of practice theory entails notions of learning, where learning is regarded as a social process that is contextual (Farnsworth, Kleanthous & Wenger-Trayner, 2016). I relied on communities of practice theory as it regards historical and cultural contexts as important in one’s learning process (Farnsworth et al., 2016). According to communities of practice theory (Kerno, 2008), relationships are seen as being reciprocal in nature, with preeminent practices being shared through common actions (Wenger et al., 2002). Within a community of practice, a flow of information usually

exists for the benefit of its members and as a sense of belonging (Wenger, 2009). What members are good at is maximised and weaknesses are perceived as growth points in the sense that something can be learned to overcome challenges (Lave & Wenger, 1991).

In undertaking my study I thus relied on the principle that communities of practice can support the expansion and exchange of knowledge. Teachers and stakeholders participated in PRA-based workshops that allowed them to share their experiences on teaching or working with learners with visual impairment. As such, an interaction of systems could take place as would occur in the context component of the bio-ecological systems theory. In this way, participants were able to exchange practices, and collaboratively devise solutions for foreseen challenges, subsequently informing the module content of the postgraduate qualification that has been developed.

Communities of practice can take on various forms, with intentional and homogeneous forms applying to this study. The community of practice in my study was intentional in the sense that participants were purposely selected, based on their specialised knowledge; yet it was also homogeneous as participants all functioned in the field of visual impairment or as teachers who were required to implement an inclusive education policy (Wenger et al., 2002).

According to communities of practice theory, learning implies a social component (Bowditch & Buono, 2001) and is influenced by the environment or context in which it occurs. As a researcher exploring possible content for a qualification in visual impairment, this link required of me to take into account that the participants were social beings who continuously made meaning of their contextual experiences, with me learning from these experiences in the context where they occurred, and viewing the participants as experts in the field. As communities of practice theory implies that one acquires knowledge of a certain context as a “knower” (Wenger, 2009, p. 2), the status of being a knower of the information I gained from the participants in turn potentially benefited them and/or others in a similar situation in terms of knowledge and specialised skills being shared in groups.

2.4.3 Social model of disability

Inclusive education is not a stand-alone theory. It should rather be viewed as an approach that exists within the discourse of the medical and social models of disability (Anastasiou & Kauffman, 2013). In this study, I viewed inclusive education from the social model of disability perspective, with disability seen from a systems theory perspective. According to the social model of disability, a problem does not lie with a learner only, but is situated in the context of the particular learner. As such, context is seen as important to understand when supporting a learner (Chaudhari, 2016).

In following an inclusive education approach in the social model of disability, every learner's performance is regarded as possible to be enhanced, thereby eliminating inequality and promoting the potential of learners (Thomas & Loxley, 2001). This approach proposes the acceptance of diversity and individual differences, and implies a range of opportunities to be involved in learning and development in an inclusive culture (Anastasiou & Kauffman, 2013), typically resulting in increased learner achievement and collaboration among stakeholders (Beveridge, 2013). As such, the social model of disability advocates social change and the support of learners and people with a disability (Shakespeare, 2006). In this regard, society is regarded as important for the growth and development of people who are disabled in maintaining support initiatives (Shakespeare & Watson, 2001).

2.4.4 Integration of existing theories in compiling a conceptual framework

In the South African context the bio-ecological model is regarded as suitable for comprehending inclusion as human beings as well as contextual physical aspects are required for successful inclusive education practice (Landsberg et al., 2015). The applicability and relevance of this theory for my study is based on the focus to achieve the "goal of helping the system work better for the individual" (Christenson & Sheridan, 2001, p. 41). In this regard, inclusive education requires of systems to accommodate, adapt and provide quality education to all learners. In terms of my conceptual framework, the bio-ecological systems theory, communities of practice theory and the social model of disabilities all emphasise the interaction between child development and systems, viewing the child, classrooms, schools as well as families as "systems in themselves" (Landsberg et al., 2005, p. 10). For a learner who experiences barriers,

such as visual impairment to learning, several systems should be involved, for example health care services, specialised teachers and education, and parental support providers.

In my study, the participants can be regarded as communities of practice who could be better equipped with skills and expertise to work with learners with visual impairment in conversation with peers during data generation sessions. As teachers may feel inadequately skilled to work with such learners, the possibility of acquiring some skills in this field implied distinct benefits. Some of the skills were acquired through collaboration with fellow teachers and stakeholders in the field. The possibility and importance of this collaboration emanated from the interaction between different systems that might possess various experiences and expertise and could see it fit to become part of positive change.

As much as visual impairment can be viewed as a medical problem, the social model of disability does not consider it in this way. In undertaking my study, I relied on the principle that visual impairment may be addressed when focusing on how the environment can be adjusted to be supportive of the learner. Following such an approach implies that various systems are involved and influential, and that attempts can be made to collaborate for the benefit of the learner or the one with visual impairment. Teachers and specialists are regarded as systems or communities in themselves, and for them to teach and attend to learners with visual impairment they need to abide by some laws (macrosystem). As such, the conducted study aimed to identify ways to address the challenges that learners with visual impairment may face by bringing teachers and stakeholders together, so that they could brainstorm solutions that can in turn inform their own practice (Darling, 2007).

My reason for relying on the selected theories is the fact that the respective theories all embrace shared knowledge and the reciprocal sharing of expertise (Lustig & Koester, 2013). They all promote the co-construction of knowledge and mutual learning, which is a process that occurred between the participants in the study, facilitated by a combination of the three theories by involving various systems and communities of support. Furthermore, I chose to rely on the selected theories because as much as the participants acknowledged that visual impairment is usually medically diagnosed, they also understood that the contexts of learners play an important role

in viewing visual impairment and providing support, based on the systems of the bio-ecological systems theory and the social model of disability (Wenger et al., 2009). Participants were furthermore able to understand that the learning and development of learners with visual impairment can, as a result, be enhanced through the support of people as well as the environment a learner functions in.

For learners with visual impairment (and every learner for that matter), learning can accordingly be considered as contextual, as proposed by community of practice theory (Farnsworth et al., 2016). This view aligns with the bio-ecological systems theory that posits that learning does not only take place in a formal setting but can occur in any context that learners find themselves in, formal or informal (Darling, 2007). In terms of learning, the social model of disability postulates that inequity should be eliminated in every context that is viewed as a platform that can support learners' optimal learning (Anastasiou & Kauffman, 2013). A link furthermore exists in that the various theories all suggest that learners, regardless of disability, should be granted opportunities and be motivated to learn. This involves support by communities of practice in the very contexts or systems they find themselves in (Smith, 2011). However, diversity and individual differences need to be acknowledged and respected according to the social model of disability, which posits that people are diverse (Olivier, 2013).

In teaching and supporting learners with visual impairment, social change is typically needed, which may address the form in which learners are viewed, treated and encouraged to engage in learning activities (Smith, 2011). In this regard, the theories I integrated and applied in my study all aim to promote learners' wellbeing in a manner in which positive attitudes are displayed towards them and also to teachers, parents and other community members who need to advocate for these learners' inclusion. Since learning implies a social element, the contexts or systems are required to be favourable platforms for learners with visual impairment to learn and develop without being stigmatised and excluded.

Due to the fact that the three selected theories all promote the co-creation of knowledge, my relying on them assisted me in accessing knowledge and expertise from the various research partners. I went into the field (schools) to observe the everyday context of the participants and how they would interact as systems in themselves and also with other systems (learners, other teachers and inclusive

education policy itself). During the reciprocal sharing of ideas, participants became a community of support for one another and for their learners, other teachers and stakeholders. Researchers collaborated and valued these relationships as they could in turn benefit by gaining knowledge and skills from one another and resolving a common challenge, namely to identify possible content areas for a qualification in the field of visual impairment.

As the social model of disability intends to give a voice to the voiceless (Shakespeare 2006), participants were able to become advocates for learners whose needs are often not explored or catered for. Through a flow of information, as per community of practice theory (Wenger, 2009), participants were seemingly empowered and developed on both personal and professional levels. The selected theories furthermore allowed the participants to reflect on their competencies and the resources they possessed, individually yet also in a collective way, focusing on how they could best utilise these to support learners with visual impairment (Wenger, 2009). In summary, the principles of collaboration, systemic support provision and placing the learner at the centre of support, as proposed by the selected theories, resonated with the aims of this study and of the broader project, resulting in the conceptual framework I was guided by.

2.5 CONCLUSION

In this chapter I explored the phenomena of visual impairment and inclusive education as contextual backdrop to the study I undertook. In terms of visual impairment, I defined the concept, described types of visual impairment as well as possible causes, stated its prevalence, and discussed the diagnosis and prominent needs of learners with visual impairment. In explaining inclusive education, I attended to the underlying principles and benefits of inclusion, as well as international and national implementation of existing policy. I concluded the chapter by explaining the conceptual framework I compiled by integrating bio-ecological systems theory, communities of practice theory and the social model of disability.

In the next chapter, I discuss Participatory Reflection and Action (PRA), referring to its meaning, development and general application. I then elaborate on the underlying principles as well as the advantages and challenges associated with PRA. In the second part of the chapter I focus the discussion on programme development, the potential value of a postgraduate qualification in visual impairment studies, and

general requirements for programme development in South Africa. I conclude the chapter by contemplating the use of PRA in developing a postgraduate qualification to provide additional background for the focus of my study.

CHAPTER 3

CONTEMPLATING THE USE OF PARTICIPATORY REFLECTION AND ACTION FOR PROGRAMME DEVELOPMENT

3.1 INTRODUCTION

In the preceding chapter, I discussed existing literature related to the conceptual context in which I conducted the current research. To this end, I explored visual impairment in terms of the condition's meaning, types, causes and prevalence, as well as the needs and challenges generally experienced by learners with visual impairment. I also outlined school provision in South Africa and current school-based support for learners with visual impairment. Next, I explained inclusive education as broader context for accommodating learners with visual impairment in school contexts. I foregrounded the underlying principles of inclusive education, and alluded to the benefits of the implementation of the policy. I referred to both international and national trends, and then described the progress of implementation locally in South Africa. I concluded the chapter by explaining the conceptual framework I was guided by in undertaking the study.

In this chapter, I discuss Participatory Reflection and Action (PRA) as the approach followed to develop a postgraduate qualification for the broader project that my study forms part of. After foregrounding background information and explaining the meaning of PRA, I describe the PRA process as well as its underlying principles, advantages and potential challenges. I then contemplate the potential value of following a PRA approach in developing a qualification by discussing programme development in South Africa, possible approaches to programme development, and the relevance of following a PRA approach when developing a qualification.

3.2 UNDERSTANDING PRA

PRA is regarded as a research method or approach that combines action and participatory research. The main objective is to facilitate positive change, while

understanding reality more comprehensively in the process (Baum, MacDougall & Smith, 2006). Participants are viewed as research partners and studies typically focus on topics that may ultimately benefit the participants, or partners in research (Chambers, 2013; Watters, Comeau & Restall, 2010). Topics that are explored in PRA often concern participants' experiences, social crises or the challenges the participants face. In line with viewing the participants as research partners that should take the lead in discussions and finding solutions to problems, PRA does not regard researchers as experts but rather as equal partners in the research process (Chambers, 2013). Accordingly, phenomena under investigation are believed to be better understood by the participants themselves who live or experience these on a daily basis (Watters et al., 2010). Researchers as a result usually merely facilitate and lead participants into discussions for the participants to find working solutions to problems, with sound research findings following (Chambers, 2008a).

3.2.1 Defining the concept of PRA

In defining PRA, it is important to highlight some differences between this approach and other research approaches. As opposed to participants being perceived as research objects when following certain approaches (e.g. in quantitative studies), participants are viewed as valuable research partners in PRA studies, as already indicated (Chambers, 2013; Patton & Cochran, 2002). In essence, PRA thus eliminates inequity by distributing the power among all people involved in a research project (Watters et al., 2010). Whereas some research approaches grant participants less power with researchers having control over the process, e.g. in experimental and some survey studies, PRA posits that participants are equal collaborators in a research project (Chambers, 2008; Patton & Cochran, 2002).

As such, the active involvement of participants is regarded as important to determine the direction of a research project. Due to participants being viewed as co-constructors of knowledge, involvement in the PRA-process may empower and capacitate participants to focus on their strengths to make plans, take action and facilitate change in challenging circumstances (Baum et al., 2006; Chambers, 1992; Ebersöhn, 2008). At the core of the application of PRA lies a change-seeking component, where the possible negative circumstances of participants are taken as reality that can be

changed or positively impacted as participants co-construct solutions to the challenges they face (Ozanne & Saatcioglu, 2008).

It follows that, in PRA studies, participants are not taken as passive receivers of knowledge and advice, but as active participants that can contribute to solutions (Reason & Bradbury, 2001). As such, PRA research does not support the ideology that researchers possess more power than participants and can instruct participants on how to behave or which actions to take (Ozanne & Saatcioglu, 2008). PRA rather emphasises the importance of balance in power between the participants and researchers (Chambers, 2013; Ferreira, 2006). As a result, the participants are expected to take ownership of the research process and make contributions that may be beneficial to both the research and their circumstances (Reason & Bradbury, 2001). In the process, participants may develop various skills related to facilitation, team work and problem solving (Herr & Anderson, 2005).

In PRA research, the research context is viewed as significant for the research process, with the result that participants are not removed from their environments for data generation activities (Minkler & Wallerstein, 2003). As part of the PRA research process, participants are involved in regular reflection, which can assist both the researcher and the participants to engage in deep level thinking of the research context, what is being experienced by the participants and how possible solutions can be constructed (Chambers, 2012). This reflective nature enables researchers and participants to explore issues of relevance and take action that can contribute to social change (Baum et al., 2006).

In summary, PRA research implies active participation and the encouragement of participants' involvement and input in understanding a phenomenon (Oakley, 2001). As part of their involvement, participants are encouraged to seek solutions for the challenges they face (Seale et al., 2011). In this manner, participants' interactions are influenced by what occurs in their environments and by the challenges they experience. Their interactions and input are in turn important to inform the everyday lives of the participants, encouraging regular reflection and continuously seeking and pursuing solutions to problems (Ladkin, 2011).

3.2.2 Development and traditional use of PRA as research approach

PRA has its roots in “critical-colonial” ideology, and is developed through researchers’ engagement with and the investigation of “knowledge of, by and for the people” (Kapoor & Jordan, 2009, p. 4). Since its inception, PRA has proposed the view that social groups, particularly those that are culturally inclined, are significant repertoires of information and lived experiences that possess the ability to replicate knowledge and find solutions to problems (Kapoor & Jordan, 2009). Social groups are in this way regarded as able to combat a globalisation ideology by preserving local resources and assertively provide space for culture to be considered during social education and research deliberations (Chambers, 2008).

PRA was introduced in the 1960s by radical groups of researchers who worked in anti-colonial societies (Kapoor & Jordan, 2009). Gaining momentum in the 1970s and 1980s, it became known as the “people-centred methodology” (Chilisa, 2012, p. 237). Although initially introduced and used in the field of agriculture research (Chambers, 2008), PRA has proved itself over the years to be effective in various other contexts, such as government, private establishments and non-governmental organisations (NGOs), to mention but a few contexts where collaboration is important between researchers and the communities they involve.

PRA represents a variety of approaches to research as well as underlying theories of knowledge (Kapoor & Jordan, 2009). The initial motivation behind blending various approaches and theories of knowledge lay in giving the poor a voice and the option of becoming change agents. In this regard, Freire (1972) and Fals-Borda (1991) both emphasise the fact that the oppressed generally possess the necessary capacity to transform their circumstances by means of collaboration with, for example, PRA researchers. As such, PRA implies that researchers learn from participants during data generation sessions (Chilisa, 2012).

Chambers (1994b, p. 953) more specifically states that PRA, formally known as Participatory Rural Appraisal, has its foundations in a number of approaches such as “activist participatory research, agro-ecosystem analysis, applied anthropology, field research on farming systems and rapid rural appraisal (RRA)”. In referring to these underlying approaches, Chambers (2012) foregrounds the focus of activist participatory research as the facilitation of discussions with the aim of empowering

participants to take action, based on improved mindfulness and assurance. To Chambers (2012), agro-ecosystem analysis lures from systems and conservation philosophy, adding to both RRA, which preceded PRA and PRA ideas of “diagramming, informal mapping, innovation assessment and transects” (Chambers, 1994b, p. 955). In terms of applied ethnography, comprehension as opposed to change is seen as central, sharing the views of PRA that learning is not static but rather an art, that attitudes and relationships are important, that indigenous knowledge is valued, and that conversation and observation with participants is important (Chambers, 2007). Finally, both RRA and PRA emphasise the idea that researchers learn from the outside about life and the circumstances of people, thereby in turn foregrounding the idea that local people possess valuable knowledge about the issues that affect them and that such knowledge can provide researchers with insight into the livelihood and circumstances of people in remote areas (Chambers, 2012). Building on this idea, PRA is regarded as a possible avenue of empowering local people while sharing, improving and analysing the knowledge they possess, and planning and taking action to address the challenges they face (Chambers, 2008).

However, various research approaches and organisations follow a top-down approach whereby community members are expected to accept help from outsiders without being involved in the process (Binns, Hill & Nel, 1997; Chambers, 2013). In most such cases, local people are not sufficiently consulted and their interests, perceptions and indigenous knowledge are not taken into account; neither are rural life dynamics observed and/or understood. As a result, solutions that are provided may be subjective and biased. When outside help is offered without consulting people from the inside, the needs of community members may thus not be met. Such programmes that lack active community involvement may fail to reach the people who are supposed to be beneficiaries (Binns et al., 1997). However, in PRA, researchers are moved from an outsider stance (etic standpoint) to an insider stance (emic standpoint) (Ferreira, 2006), being guided by the participants from the inside.

3.2.3 Underlying principles of PRA

Uddin and Anjuman (2013) underscore core principles central to PRA projects. The first principle implies that PRA has to respond to attitudes and behaviour, and be sensitive to culture. This implies a willingness on the side of the researcher to be taught

by participants and remain flexible and patient during the research process (Chambers, 1992). Secondly, because participants may at times be illiterate, it is important for ideas and information to be presented visually through the use of, for example, photographs, charts and drawings (Chambers, 2002; Uddin & Anjuman, 2013). In this way, multiple ways of sharing information and knowledge are created. The third key principle as identified by both Chambers (1992) and Chilisa (2012) relates to the fact that PRA generally relies on multiple techniques in an endeavour to accommodate participants. Fourthly, it is important for researchers to remain reflexive and aware of the various roles involved and allow participants an opportunity to lead (Uddin & Anjuman, 2013).

As facilitators, researchers therefore need to immerse themselves in the culture and at times the language and context of the participants (Gibson, 2002). When researchers engage with participants they may be accepted more easily, thereby partially addressing the challenge of being treated as outsiders (Chambers, 2008). Continuous observation and noting participants' experiences imply the possibility of positive change occurring when the strengths and assets of participants are identified and mobilised. Even though some researchers may find it hard merely to facilitate and not direct, participants can be utilised as trainers and co-facilitators, with the added advantage of participants knowing one another and feeling comfortable to participate openly (Chambers, 2008).

Positive change is, however, not possible without collaboration and partnerships that form part of PRA research. Taking ownership and action can assist participants even after the completion of a research project based on collaboration with others when starting to function independently of researchers, and in finding solutions to address the challenges that arise (Chambers, 2012). To this end, a process of change requires of participants firstly to be willing to change and then work alongside others towards achieving such a goal.

As such, PRA offers researchers that are interested in promoting positive change with the possibility of interacting with participants (people on ground level) in a manner that is empowering and supports partnerships (Aubel, 2004). It follows that all networks, relationships and connections that are formulated during the course of a study are important (Aubel, 2004), including the trusting relationship between the researcher and

participants (Mukherjee, 1997). PRA embraces a culture of sharing, be it knowledge, ideas, experiences or information (Chambers & Guijt, 1995). Relationships between researchers and participants, participants among themselves, as well as researchers and implementers of PRA-actions are therefore characterised by the sharing of field experiences, knowledge and recommendations (Chambers & Guijt, 1995). Such sharing of information can occur during informal conversations, or during formal data generation activities, as well as through literature and/or other professional media platforms (Chambers & Guijt, 1995). This culture of sharing in turn promotes mutual learning for all those involved in the process (Makoelle, 2014).

It follows that PRA requires of both the researchers and participants to display respect and consideration for others, who share their ideas and experiences. Closely related, it is important that researchers and participants are willing to admit when they could have done something differently and learn from such experiences (Chambers & Guijt, 1995). In this regard, it is imperative for researchers to be open to learn about the customs and acceptable interaction methods of the communities they work with (Chambers, 2013). Trusting the process and believing that participants are capable and will provide valid and trustworthy information is thus important when conducting PRA research. Furthermore, researchers need to ask for assistance when needed, acknowledge others and be open to be taught by the participants (Chambers & Guijt, 1995).

The ideal context for conducting PRA research is the natural setting or environment of the participants (Makoelle, 2014). Throughout, the aim remains to propagate skills among participants, enabling them to identify and use their available resources to address challenges and become more resilient. As already stated, participants are expected to lead some of the processes, with researchers merely providing guidance and acting as facilitators (Makoelle, 2014). To this end, the manifestation of strategic plans to resolve challenges depends on the participants themselves, also after the researchers have left, with the participants being the experts in finding solutions to problems in their specific situations.

As such, PRA asks of participants or community members to “do it” themselves (Chambers, 1994a, p. 1254) by being actively involved in community development, and by not allowing researchers to take over or prescribe any established projects or

plans (Chambers, 1994a). From the start, community members should be involved in the identification of challenges and potential resources that may assist them in these, mapping out potential solutions with the mere support of researchers instead of researchers coming up with solutions and community members being passive receivers of information and ideas (Chambers, 2013). It remains the responsibility of community members to ensure that their needs are continually met in order to ensure sustainability (Chambers, 2007).

3.2.4 Advantages of PRA

Based on the cycles of appraisal, reflection and action, PRA research can assist participants to realise their available assets and resources, and then rely on these to solve problems (Aubel, 2004). In this manner, different partners from different backgrounds may be brought together to work towards a common goal and bring about positive change. The fact that PRA typically includes a post-data generation and analysis stage, where researchers go back to the field for monitoring and evaluation, can give participants the opportunity to make continued contributions and provide ongoing input in the processes involved (Aubel, 2004). Participants that are usually community members, can as a result contribute to positive change in their own lives and situations based on their participation in a PRA study, even before completion of a project or dissemination of the research results (Pain & Francis, 2003).

According to Pain and Francis (2003), participatory methodologies imply the possibility of reaching groups of participants that may be difficult to reach. These groups include, for example, vulnerable groups of participants, such as poverty-stricken communities. PRA is furthermore specifically useful when group work is anticipated, as it allows for the inclusion of different group members, thereby encouraging information sharing and positive change (Baum et al., 2006). This kind of research as a result typically reflects the ideologies and perspectives of those who participate, their interests and main concerns (Pain & Francis, 2003). Due to the fact that PRA entails collective problem identification and resolution, participants can be guided to identify their resources and assets, and tailor solutions in a manner that best suit them and their contexts.

When conducting PRA research, the researcher can be immersed in the culture and routine of the people who participate (Baum et al., 2006). PRA research can furthermore evoke other partnerships among participants, giving them the opportunity

to see beyond the research study and continue to resolve the challenges they face (Baum et al., 2006). In this way, PRA can bring local people together, encourage them to share information, learn from one another and collaboratively seek solutions to problems they experience, while researchers learn from the daily experiences and indigenous knowledge of the participants that are involved (Egerton University, 2000). As such, empowerment seemingly applies to multiple directions, as even the people involved as planners or assistants may learn and in the process be empowered (Chambers, 1994). As PRA engages participants as co-facilitators and partners, participants generally become aware of the fact that they can achieve what they thought they could not when involved in such a study.

PRA studies typically involve multiple techniques for data generation, thereby supporting rigour (Egerton University, 2000). For example, a combination of workshops, interviews, observations and audio-visual techniques may be used, supported by visual techniques in the form of, for example, posters (PRA-matrices), photographs, drawings and diagrams, thereby accommodating participants who are illiterate. Discussions during workshops and/or focus group sessions can furthermore be valuable when involving participants who struggle to read and write (Chambers, 2007). Being able to consider and accommodate participants in this way once again adds to the advantages of PRA research, allowing empowerment and enabling participants to sustain projects and partnerships in future.

3.2.5 Challenges associated with PRA

A potential challenge associated with PRA research relates to the principle that participants should determine the process, thereby implying unpredictability and the possibility of such studies being time-consuming (Chambers, 2017). The fact that a researcher may be required to spend a considerable amount of time on building working relationships with the participants may furthermore add a challenge in terms of the time involved in PRA research (Egerton University, 2000). Closely related, PRA can produce large data sets that may be overwhelming for emerging researchers, requiring extended time for data analysis to be completed.

Other potential challenges relate to researchers being influenced by their own bias, not considering power relations or experiencing difficulty to allow participants to take the lead (Kapoor & Jordan, 2009). This challenge implies the subsequent possibility

of researchers not fairly representing the participants' views, more specifically when researchers do not include member-checking.

PRA as a participatory methodology is occasionally criticised for its strong focus on reflexivity rather than other aspects such as inequity that, although not planned, may occur (Chambers, 2017). Furthermore, although PRA aims to bring participants/community members together, at times, already existing differences in communities may disrupt the intended process of empowerment (Pain & Francis, 2003). As a result, participants may not be willing to share their experiences openly, which may in turn result in superficial and at times brief data (Pain & Francis, 2003). In addition, certain skills are required of facilitators properly to capture what the research requires, effectively interact with participants and deal with data and any challenges that may arise during field work. As such, some training may be required, especially for researchers that are new in the use of PRA or related participatory methodologies (Gibson, 2002). As I relied on PRA for my master's study in Education and due to the research team being skilled in terms of this methodology, I did not experience these challenges during my study.

As much as PRA aims to study participants in their natural contexts, no guarantee can be provided that participants may not modify their behaviour or be manipulative in their responses (Gibson, 2002; Maree, 2007). Moreover, the presence of someone observing and interacting with them may result in participants becoming nervous and not providing open authentic contributions (Gibson, 2002). However, such incidences can in turn result in a researcher not noting observations accurately. Participants may furthermore perceive such incidents as a result of perceived power differences. In addition, differences in age, culture, ethnic background and education level may effect human participants and the discussions that take place (Pain & Francis, 2003).

Finally, the requirement to conduct research in the natural contexts of participants may imply travelling to where the participants are located (James, 2007). In the absence of funding, this may pose some financial challenges to researchers. Furthermore, the training of researchers in PRA methodology may also be costly. As alluded to earlier, PRA may produce large amounts of data, resulting in the need for research assistants, once again implying training and remuneration expenses. In the same manner, in the case of large data sets, data analysis may be costly when, for example, involving

transcribers and analysts (Chambers, 2002). In undertaking my research, I remained cautious of the potential challenges of PRA, and attempted to limit the effect of these as far as possible.

3.2.6 Contexts in which PRA is often applied

The use of PRA has grown over the years, more specifically in recent years, due to an increased focus on people being empowered while involved in research. In addition to research initiatives, NGOs, government departments and private institutions, individuals have also adopted PRA for undertaking projects (Ladkin, 2011). Besides PRA allowing for increased opportunities of new partnerships to be formed, this approach can also assist urban-based researchers to better understand the circumstances of people in remote areas (Chambers, 2012). Furthermore, policy change may result from new insight gained in collaboration with participants on ground level, as part of a PRA project (Ladkin, 2011).

PRA was initially applied in the context of community development in the agricultural, forestry and livestock sectors in Pakistan (Alam & Ihsan, 2012). It has, for example, been applied in Gambia for rural development projects (Brown, Howes, Hussein, Longley & Swindell, 2002) by Catholic churches in Latin America to address the challenges of poor and marginalised people and seek solutions together (Adebo, 2000), and in Australia to improve the activities of landcare groups (Dunn, 1993). Additionally, when visualisation and the use of local assets were introduced in Thailand at the end of the 1990s, PRA was used with local people to analyse existing farming systems to introduce appropriate change (Adebo, 2000).

In South Africa, participatory methodology has increasingly been applied over recent years, especially with teachers and community volunteers. Some examples include the studies of Mbongwe (2012) in investigating the experiences of teachers as co-researchers in a long-term partnership with university researchers, relying on PRA. This investigation revealed some understanding by co-researcher teachers of power relations and the importance of partnerships that could lead to positive social change (Mbongwe, 2012). The investigation was based on the evaluation of an intervention that was meant to improve teachers' ability to provide psycho-social support to vulnerable individuals in the school-community, through the application of PRA, during which participants collaborated to address the challenges they faced (Ferreira &

Ebersöhn, 2011). PRA was similarly applied in follow-up research that explored the “insights into teacher resilience and poverty” in three provinces in South Africa (Ebersöhn, 2014, p. 568) where PRA allowed for systematic observations to be done for an extended period of time – ten years – in terms of the resilience of people in at-risk communities. In another South African study, PRA principles were applied to investigate learners’ experiences after being taught Natural Sciences and Life Orientation by means of an enriched curriculum, indicating that PRA was beneficial in gaining insight into the participants’ acquired knowledge and views (Bentley, 2016; De Vos, 2017).

With the country being characterised by diversity in terms of ethnicity, culture, language, educational and socio-economic status, South Africans face an array of challenges, such as poverty, low income and unemployment, which may be addressed through PRA-driven projects (World Bank, 1995). Research in this field remains important to intervene in and address some of the social challenges that many South Africans face. To this end, the need for partnerships between different stakeholders for developing communities exists. More specifically, the need exists to enhance awareness among community members of the power they possess that could result in positive change in their situations (Mbongwe, 2012). In this way, externally initiated interventions may guide participants to realise their strengths, assets and resources, and put these to use.

A fundamental feature recognised by PRA that makes its use particularly suitable in the South African context, is that situations are viewed holistically when following this approach (Binns et al., 1997) and that indigenous knowledge and local ideas and points of view are respected. PRA thus allows for projects to be undertaken from various backgrounds, including the context of the poor and marginalised (Community Development Resource Association [CDRA], 2001). As ongoing attempts for sustainable development are required in South Africa, consultation and involvement of the people on ground level may address the need for positive change.

A study conducted in the Eastern Cape province in South Africa, for example, involved a community in establishing a community-driven agricultural cooperative by focusing on the “key elements of local economic development (LED)” (Binns et al., 1997, p. 6). For this purpose, community leaders and local farmers partook in discussions that

elicited information on the formation of the cooperative, as well as existing dynamics in the specific context (Binns et al., 1997; Edge, 2001). The findings of this study indicate the possibility of a positive impact on developing local farmers and improving the standard of living by securing an income for families (Binns et al., 1997). To this end, opportunities for employment were developed for community members as well as entrepreneurial opportunities provided for neighbouring residents who received their supplies from the cooperative involved (Binns et al., 1997; Edge, 2001). This study demonstrates the possibility of previously marginalised communities being able to initiate sustainable programmes that may combat poverty and disempowerment.

In another PRA study in South Africa, student teachers' experiences were investigated for the development of teacher identity. In this study, PRA was used to supplement a community of practice engagement that could contribute to the student teachers' teacher identity (Fraser, 2018). The findings of this large scale study on a total of 2 309 final-year student teachers confirm the vigorousness of PRA and its ability to create collaborative networks. Furthermore, PRA was found to be useful in the sense that it allowed researchers to reflect on the limitations of teaching practice and address these (Fraser, 2018).

3.3 PROGRAMME DEVELOPMENT

One of the purposes of the broader project that my study forms part of was to develop a postgraduate qualification for equipping practising and prospective teachers with the necessary knowledge and skills to teach and support learners with visual impairment. In this section, I provide background on the qualification that has been developed. I then explore some traditional approaches to programme development, and finally contemplate the use of PRA when developing a postgraduate programme, being the selected approach for this study.

3.3.1 Background information on the postgraduate qualification in visual impairment studies

The Advanced Diploma in Visual Impairment Studies has practising and prospective teachers who work with learners with visual impairment as target market. The

qualification has been developed at NQF⁵ Level 7, with the entry requirements being a four-year Bachelor of Education or equivalent degree; a general first degree or diploma, together with a Postgraduate Certificate in Education; a former Advanced Certificate in Education (Level 6 on the former 8-Level NQF system); a former Further Diploma in Education that follows a former professional teaching qualification; or a former four-year Higher Diploma in Education. In addition to the entry requirements, completion of the module Technology for Teachers (ICT 430) is required before enrolment into the programme and demonstrated Braille proficiency will be required before completion of the programme. The qualification consists of four core modules (18 credits each, except the research and practice module, which carries 30 credits) focusing on an understanding of inclusive education and disability as diversity, understanding and teaching learners with visual impairment, supporting learners with visual impairment, and lastly, research in and practice of visual impairment. In addition, students who enrol have to select two of a possible four elective modules, focusing on orientation and mobility for learners with visual impairment, assistive technology for learners with visual impairment, facilitating partnerships and stakeholder involvement, and lastly, school leadership and management of schools for learners with visual impairment.

The Advanced Diploma in Visual Impairment Studies will be the first formal qualification of this nature and focus area in South Africa. It is a result of the need for better implementation of inclusive education policy in the country, with a specific focus on learners affected by visual impairment. Learners with visual impairment are often disadvantaged as teachers may lack the necessary knowledge, skills and resources to teach and support them scholastically as well as for holistic development to occur (Landsberg et al., 2015). This qualification may equip teachers with the necessary knowledge and expertise to deal with visual impairment in the classroom in both full service and special needs school contexts.

⁵ National Qualification Framework.

3.3.2 Requirements for tertiary programme development in South Africa

When developing a tertiary qualification in South Africa, a range of important aspects need to be considered. According to Leuders (2016), a qualification that is developed has to address certain educational and training needs, requiring of the developers to understand the skills and competencies that a qualification needs to result in prior to commencing with the development process (Leuders, 2016). Moreover, an outline and criteria for meeting the required knowledge and skills firstly need to be formulated, also indicating how a programme will be offered and which bodies/authorities need to be consulted for the qualification to be approved and accredited (Janse van Rensburg, 2005).

Next, the demand for a proposed qualification is to be considered before developing any programme (Leuders, 2016). When developing a qualification, entry requirements have to be stipulated for prospective applicants to know what is required of them to apply for entry into the programme (Department of Higher Education and Training, 2013). In addition, the duration of a proposed programme has to be determined as well as the foreseen outcomes for the programme and respective modules.

In South Africa, the approval of all tertiary qualifications is overseen by the Council of Higher Education (CHE). According to its standards, the CHE requires that all programmes adopt the Higher Education Qualifications Sub-Framework's (HEQSF) approach of having "legitimacy, credibility and a common, well-understood meaning" (CHE, 2013, p. 3). After receiving CHE approval, proposed qualifications are accredited by the South African Qualification Authority (SAQA). All these approvals and accreditation procedures need to be met before a programme can be advertised and offered.

According to SAQA, before a qualification can be approved and registered at the NQF, certain criteria need to be met. For this purpose, any proposed qualification needs to "include clear specifications of outcomes, using the level descriptors, state the minimum requirements to obtain the qualification and identify the relevant sub-framework on which it is recommended for registration on the NQF" (SAQA, 2013, p. 6). When applying for SAQA accreditation, a specific format is followed (SAQA, 2013), indicating the relevant aspects and areas of the proposed qualification. These include

the title of the qualification, the sub-framework, field and sub-field, level of the qualification and credits for the qualification. An application for approval should furthermore capture the rationale of the proposed qualification, the purpose, rules of combination, entry requirements as well as exit level outcomes, and associated assessment criteria. In addition, areas of international comparability, integrated assessment, recognition of prior learning (RPL) and articulation need to be described.

3.3.3 Possible approaches to programme development

Different approaches can be followed when developing a tertiary qualification. In most, if not all, instances, a *needs analysis approach* is followed where the needs and challenges of a targeted population are determined to develop a qualification and material that may address existing needs (Thomas, 2016). When following this approach to qualification development, a clear understanding of the problem or situation necessitating the proposed qualification is required. Once a problem has been identified and is understood, a qualification can be developed (Thomas, 2016). The phase of assessing existing needs is considered as the first and crucial stage of qualification development when following a needs approach. Consequently, such a needs analysis and problem identification leads to specifying a foreseen qualification purpose, aims and outcomes in such a way that these may address the identified existing needs (Thomas, 2016).

Another possible approach to tertiary programme development is the *outcomes-based approach* (Misko, 2015). This approach focuses on what prospective students may acquire in terms of knowledge and skills by completing a certain qualification. As such the focus of this approach is performance-based (Misko, 2015). When adopting the outcomes-based approach, students are thus required to demonstrate their application of knowledge and skills as part of the qualification.

In some countries, a *competency approach* to programme development is followed, where students are taught what is currently relevant in the world of work to prepare them for their desired future occupations. When following a competency approach, certain tasks are included in a programme that can prove that students are ready and competent for the world of work upon completion of the programme (Misko, 2015). The outcomes-based and competency approaches are often adopted, when

qualifications are discontinued due to low student numbers, and need to be replaced by similar yet revised programmes.

Another approach that can be followed for tertiary programme development is the so-called *stakeholder consultation and involvement approach* (Misko, 2015). This approach implies consultation with experts and stakeholders who may provide guidance when developing a qualification (Ofsted, 2014). Consulting and involving stakeholders in programme development implies a process where they form part of discussions and developmental work from the start, providing input in the identification and finalisation of the content of a proposed qualification. As such, the stakeholder consultation and involvement approach relies on the availability and willingness of stakeholders to provide meaningful input during programme development (Tuck, 2007). This approach is generally viewed as rich in information and rigour.

Finally, SAQA proposes a *Design Down, Deliver Up* (SAQA, 2005, p. 5) approach to qualification development as another option. This approach emphasises the integration of learning and achievement, and requires clear stipulations of the purpose of a foreseen qualification and for comprehensive planning to take place in terms of how the identified outcomes will be assessed (SAQA, 2005). According to SAQA (2005), when designing down and delivering up, not only will the purpose of a qualification be evident but students will also be equipped to achieve the formulated purpose and be prepared for assessment and attaining stipulated outcomes. In this regard, SAQA (2005) proposes a three-step approach to programme development, entailing an analysis of the proposed qualification (particularly in terms of its purpose and level), an analysis of the foreseen outcomes, and an integrated analysis of the outcomes and criteria for assessment (SAQA, 2005).

3.3.4 Following a PRA approach when developing a postgraduate qualification

In developing the advanced diploma qualification that forms part of the broader project that my study is embedded in, we (the research team) decided to follow a PRA approach. This decision gave us as researchers the leverage to drive the process of programme development in consideration and collaboration with experts (including teachers) who co-constructed knowledge and informed the programme and module content based on their expertise. PRA thus allowed us to engage actively with the participants in a manner that allowed them to make meaning of the research focus

against the background of their experiences in practice (Ebersöhn & Ferreira, 2012). As a researcher as part of the broader research team, I did not retain any control or power over the participants, allowing them to take control of the process and freely express themselves while sharing ideas for the programme that had to be developed (Romanow, 2014). These principles link with the needs analysis and stakeholder consultation and involvement approaches discussed in the previous section, thereby implying the benefit of accurately determining the needs of teachers working with learners with visual impairment while also supporting them to become better practitioners.

We further decided to utilise PRA for the development of the qualification, based on the PRA principle that participants and any research context should be viewed holistically (Levine & Marcus, 2010). As all experiences and contributions are accordingly valued, PRA enabled us to respect the ideas and input of the participants (Patton, 2002). On a practical level, we thus engaged with participants in a courteous manner and remained open and willing to learn from them as experts. Furthermore, PRA enabled us to probe when we did not understand, create a safe space for participants and manage the sizes of the groups we worked with (Egetron University, 2000). Most importantly, PRA allowed for the active sharing of ideas and experiences, points of view and information, resulting in a conducive working and sharing environment (Chambers, 2012).

The participants of my study and in the broader project included teachers and expert stakeholders in the field of visual impairment, who could contribute to the content of a qualification in this area, due to their possessing specialised knowledge and expertise in the field. Their willingness to participate and provide input reflected the participants' realisation that they were resources in themselves and were able to add ideas to the development of the foreseen qualification. In addition to the participants realising their own assets and value, they collaborated with fellow participants and the research team, discussing their daily experiences yet also seeking solutions to some challenges they experienced in supporting learners with visual impairment. As such, working in a team in this manner facilitated a process of sharing, empowerment and subsequently the development of the said postgraduate qualification (Chambers, 2008). These principles of PRA closely relate to the stakeholder consultation and involvement

approach I discussed in the previous section, which implies the benefit of richness of information provided by people in a specific field (Ofsted, 2014).

PRA is meant to embrace the indigenous knowledge and perspectives, ideologies, experiences and practices of participants (Kapoor & Jordan, 2009). As such, the participants in my study could share what they were going through in their daily interactions with learners with visual impairment, enabling others to respect their unique views based on their specific contexts, and provided related thoughts. As a researcher, it was thus my duty to ensure that the participants realised that the research team would not enter their territory or advise them on how to teach or apply inclusive education strategies in their classrooms, but rather wanted to explore this phenomenon with the participants taking the lead.

Reflexivity was important throughout, and required of the research team to remain self-aware and also aware of the context where we conducted the research, and in which capacity (Gilbert, 2001; Maree, 2007). Differences of ages, ethnicity and culture were prevalent, however dealt with professionally, guarding against the participants perceiving power differences to exist. We constantly reminded ourselves not to take the lead as the participants (as experts) could be trusted to lead the process and discussions (Gilbert, 2001). In summary, we decided to follow a PRA approach for programme development due to the underlying principles supporting collaboration, empowerment, facilitation and knowledge sharing, which assisted the research team in gaining expert ideas for the content to be included in the postgraduate qualification being developed.

It follows that PRA relates to all the various possible approaches to programme development (Consult the previous section – 3.3.3) and allows for integration of the strengths of the various approaches, thereby representing an integrated approach to programme development. More specifically, PRA allowed the research team to rely on some components of the needs analysis approach, the design down deliver up approach, the outcomes-based approach, the competency approach and the stakeholder consultation and involvement approach (Misko, 2015; Ofsted, 2014).

In relating the implemented PRA approach to the needs analysis approach, the funder of the project and the research team identified the need of teachers to be better equipped to implement inclusive education policy and specifically support learners with

visual impairment in the classroom (Thomas, 2016). In terms of the design down, deliver up approach we contemplated the purpose of the qualification before developing the module content (SAQA, 2005). Next, in terms of the outcomes-based approach, we aimed to ensure that the developed qualification would provide students who complete the programme with the relevant and necessary knowledge and skills (Misko, 2015). Relating the PRA approach to the competency approach, the possibility of ensuring that the developed qualification would equip students with what is relevant for the world of work applies, while the principles of the stakeholder consultation and involvement approach assisted us to co-construct and develop the module content in consultation with expert stakeholders and teachers in the field of visual impairment (Misko, 2015; Ofsted, 2014).

3.4 CONCLUSION

In this chapter, I contemplated PRA as possible approach to tertiary programme development. I commenced my discussion by exploring PRA's meaning, development and traditional use. I discussed PRA's underlying principles, as well as associated advantages and potential challenges, and then elaborated on the contexts in which PRA is often used. In the second part of the chapter I explored programme development in terms of approaches that are often employed, and then contemplated the possibility of following a PRA approach when developing a postgraduate qualification.

In the next chapter, I describe the research process. I explain the selected paradigms, research design and selection of participants. Next, I discuss the data generation and documentation, analysis and interpretation procedures I utilised. I also reflect on my role as researcher, and conclude the chapter with discussions on ethical considerations and the rigour of the study.

CHAPTER 4

RESEARCH PROCESS AND METHODOLOGY

4.1 INTRODUCTION

In the preceding chapter, I discussed PRA as the approach followed during the development of the Advanced Diploma in Visual Impairment Studies in detail. I also explored programme development in general and foregrounded approaches that may be followed when taking on such a task. I concluded the chapter by contemplating the relevance and value of utilising PRA for programme development.

In this chapter, I discuss the research process of my study. I explain the paradigmatic choices I made, the research design of the study and the data generation, documentation and analysis I completed. I conclude the chapter with a discussion of ethical considerations and quality criteria.

4.2 PARADIGMATIC PERSPECTIVES

In this section, I discuss the selected epistemology, namely interpretivism, and the methodological approach of my study, namely participatory research.

4.2.1 Epistemological paradigm

In the endeavour to gain insight into the experiences and perceptions of teachers and stakeholders in the field of visual impairment, I relied on interpretivism. I specifically attempted to gain insight into teachers' understanding of inclusive education policy and what the teaching and support of learners with visual impairment would imply. In addition, I wanted to understand how teachers and expert stakeholders that are not based in the school context, could contribute to the content of the qualification that was to be developed through the use of PRA (Chowdhury, 2014).

In relying on interpretivism, I had to understand that people in general, and the participants in this study in particular, differ and that the manner in which people make meaning is different for various participants. I similarly needed to understand that participants' experiences and needs are subjective, and that my role was to allow participants the opportunity to inform me of their unique perceptions so that I could

attempt to comprehend their needs and experiences from their perspectives (Cohen, Manion & Morrison, 2011). The principle that people may experience or go through the same situation but interpret it differently implied the possibility of various ideas for programme content, based on the participants' unique experiences and interpretations of these.

In addition to the subjective experiences of participants, interpretivist researchers are generally also not involved in an objective manner or merely observe from the outside (Carcary, 2009; Mack, 2010). As researcher, I was consequently part of the study, exploring how teachers viewed inclusive education and the support of learners with visual impairment, as well as what they thought a qualification in the field could entail. However, I remained aware of the research process and that I could influence it if I did not remain aware of my role as researcher, or regularly reflect on my experiences and interpretations (Biletzki & Matar, 2014). I furthermore remained aware of the fact that my background was different to that of the participants and that I had to guard against biased interpretations.

My choice of interpretivism relates to the possibility of the participants constructing knowledge and giving meaning to their own reality, without being influenced by the presence of me as researcher when utilising this metatheory (Cohen & Manion, 2007). In providing meaning and constructing knowledge, interpretivism typically allows participants to tap into the very reality that they may have thought cannot be explored to find solutions to the problems they face. In this regard my own knowledge of inclusive education and visual impairment could not be imposed on the participants as they had to share their own meaning making, based on their experiences as experts in these fields (Mack, 2010).

As such, interpretivism allowed me to understand the participants' needs and experiences as individuals but also as a collective, observing their "behaviour-with-meaning" and the experiences they shared in a participatory way (Cohen et al., 2011, p. 17). Through meaningful interactions during PRA-based discussions, interpretivism allowed me as researcher yet also allowed the participants to comprehend the details they discussed on inclusive education policy, the needs of learners with visual impairment and the possible value and content of a postgraduate qualification in visual impairment studies (Cantrell, 2001; Lor, 2011).

An advantage of utilising interpretivism for this study and the broader project it forms part of is that it enabled me to enter the life-worlds of the participants and understand their expertise in the field of visual impairment, relying on their knowledge and experiences during the development of the postgraduate qualification (Collins, 2010). In the case of both the teachers and the stakeholders, interpretivism furthermore allowed me to be present during the construction of ideas on the possible ways in which teachers may be equipped to teach and support learners with visual impairment through the implementation of White Paper 6 (Department of Basic Education, 2001) and also in terms of suitable content for the qualification that has been developed. Another advantage of the decision to utilise interpretivism relates to the fact that, throughout the study, I did not observe from the outside or detach myself from the process, but rather viewed the participants as experts of their own environment, allowing them to lead the research process and discussions (Saunders, Lewis & Thornhill, 2012). Furthermore, interpretivism allowed me to study the particular phenomenon of developing a qualification in interaction with the participants during different phases and levels of data generation (Collins, 2010).

A possible challenge often associated with interpretivism relates to participants modifying their behaviour or contributions when observed by someone they were not familiar with (Collins, 2010). In attempting to avoid this, participants were briefed about the intention of the study and the purpose of observations requesting them to remain authentic in their contributions. They were invited to ask questions for clarity and could withdraw from the study at any stage in the process if they no longer felt comfortable to form part of the research. In addition, sufficient time was spent on establishing trusting relationships with the participants before commencing with data generation.

Another potential challenge associated with interpretivism relates to different and at times contradicting meanings that may be articulated in groups (Myers, 2009). To address this possibility, the uniqueness of the participants and their contributions was acknowledged and appreciated, as the results of the study could benefit them as well as people in similar situations and teachers in future (Broom & Willis, 2007). Furthermore, interpretivism may be criticised for the possibility of researcher bias and the limited generalisability of results. The use of multiple data generation techniques as well as reflexivity enabled me to minimise bias. In terms of generalisability, it was not my aim to generalise any findings but rather to gain an in-depth understanding of

a specific phenomenon in a specific context, yet providing sufficient evidence for readers to use their own discretion when transferring the findings to similar contexts (Saunders et al., 2012).

4.2.2 Methodological approach

I followed a participatory research approach, more specifically PRA. This approach allowed me to gain insight into the participants' construction of knowledge about their everyday lives, experiences, routines and social realities (Flick, 2011). As relationships are central when following a PRA approach, the researcher is typically considered as insider who actively interacts with participants. As much as the researcher is involved, however, expert knowledge and experience remain qualities of the participants, with their perspectives and points of view being at the core of all discussions. To an extent, PRA also looks at the attitudes of participants (Chambers, 2008; Green, 2007), exploring phenomena in a natural context where participants are not likely to modify their behaviour; yet are actively involved in the research process (Denzin & Lincoln, 2000; Flick, 2011).

In its nature, PRA does not generally rely on a single method of data generation and is therefore flexible in the use of various methods (Denzin & Lincoln, 2000). I utilised a variety of methods that made it possible for me to observe and understand individual as well as group experiences. In following a PRA approach, participants' responses influenced the discussions and activities that occurred (Green, 2007). Some additional data was obtained in this way, which was not anticipated initially, resulting in my treating each data set critically (Green, 2007).

In this particular study, participants were selected based on their knowledge, experiences and expertise in the field of visual impairment. In analysing the data obtained from participants through multiple techniques, I was able to attend to circumstantial considerations of teachers working in the field of visual impairment (Cohen et al., 2011). Even though PRA research perceives the researcher as research instrument, participants were viewed as fundamental to the study and as the main generators of data (Creswell, 2014). My role as key instrument merely involved the planning and facilitation of PRA activities, observing classroom processes and research sessions, conducting interviews and compiling field notes and audio-visual data. Throughout, data generation focused on both interaction and an investigation of

the phenomenon (Chambers, 2008; Rahman, 2017). As a PRA researcher, I could thus not be detached from the process of research but had to remain aware of and understand my role to limit potential bias (Chambers, 2008).

When conducting PRA research, findings cannot be generalised as a sample is seldom representative, with different people having different viewpoints and experiences of specific situations or contexts (Makoelle, 2014). As such, PRA affords each person the opportunity to construct meaning in an own unique way. What is specifically significant to PRA, is the particular experiences of a specific group of people in their natural context, involving their unique responses, reactions as well as the meaning they give to experiences, reporting them in words as opposed to numbers (Chambers, 2012). To provide detail on the experiences of participants, PRA research allows for the production of a scholarly report (for example this thesis) where readers can be guided to understand the experiences of the people who participated.

An advantage of PRA is that it provides for thick descriptions of participants' experiences (Green, 2007; Makoelle, 2014). PRA can furthermore enable researchers to identify invisible aspects related to the participants and communities they belong to, such as their beliefs and attitudes (Green, 2007). Relying on PRA for this study assisted me in identifying participants' attitudes towards inclusive education and its implementation when teaching learners with visual impairment. As such, PRA allowed the participants to construct meaning of their reality and experiences, and then report these in their own words. Additionally, PRA assisted me as researcher to value the participants' meaning making of visual impairment and inclusive education, and not to impose my meaning making on the participants (Creswell, 2014). Based on its emergent nature, PRA research allows for flexibility, not prescribing but rather giving the researcher an opportunity to modify processes according to the relevance of the study and data generation as research progresses (Chambers, 2008; Creswell, 2014).

When following a PRA approach, researchers may face the challenge of being biased and potentially contaminating the data (Chambers, 2008). To this end, the possible subjectivity of the researcher is a reality of PRA. Reflexivity assisted me to guard against this challenge (Rahman, 2017), and entailed constant conversations with my supervisor, and regular debriefing and reflection sessions. I also recorded my observations and reflections in my field notes and reflective journal (Rahman, 2017).

Another challenge associated with PRA research relates to its unsystematic nature, with the result that data generation and analysis may be perceived as messy when following this approach (Mason, 2002). To this end, a planned protocol was put in place and constant discussions transpired between the research team members to ensure that data generation sessions were facilitated in a similar way at all research sites. As PRA requires effort and dedication from the researcher, the research process may be seen as exhausting and time-consuming. To overcome this potential challenge, research assistants were employed and trained, to support the core research team in facilitating all the sessions. In addition, the time between data generation sessions was carefully planned (Mason, 2002).

4.3 RESEARCH PROCESS AND METHODOLOGICAL STRATEGIES

In this section, I discuss the research process in terms of the selected research design and methodology, selection of cases and participants as well as data generation, documentation and analysis strategies. Figure 4.1 captures these choices and provides an overview of the research process.

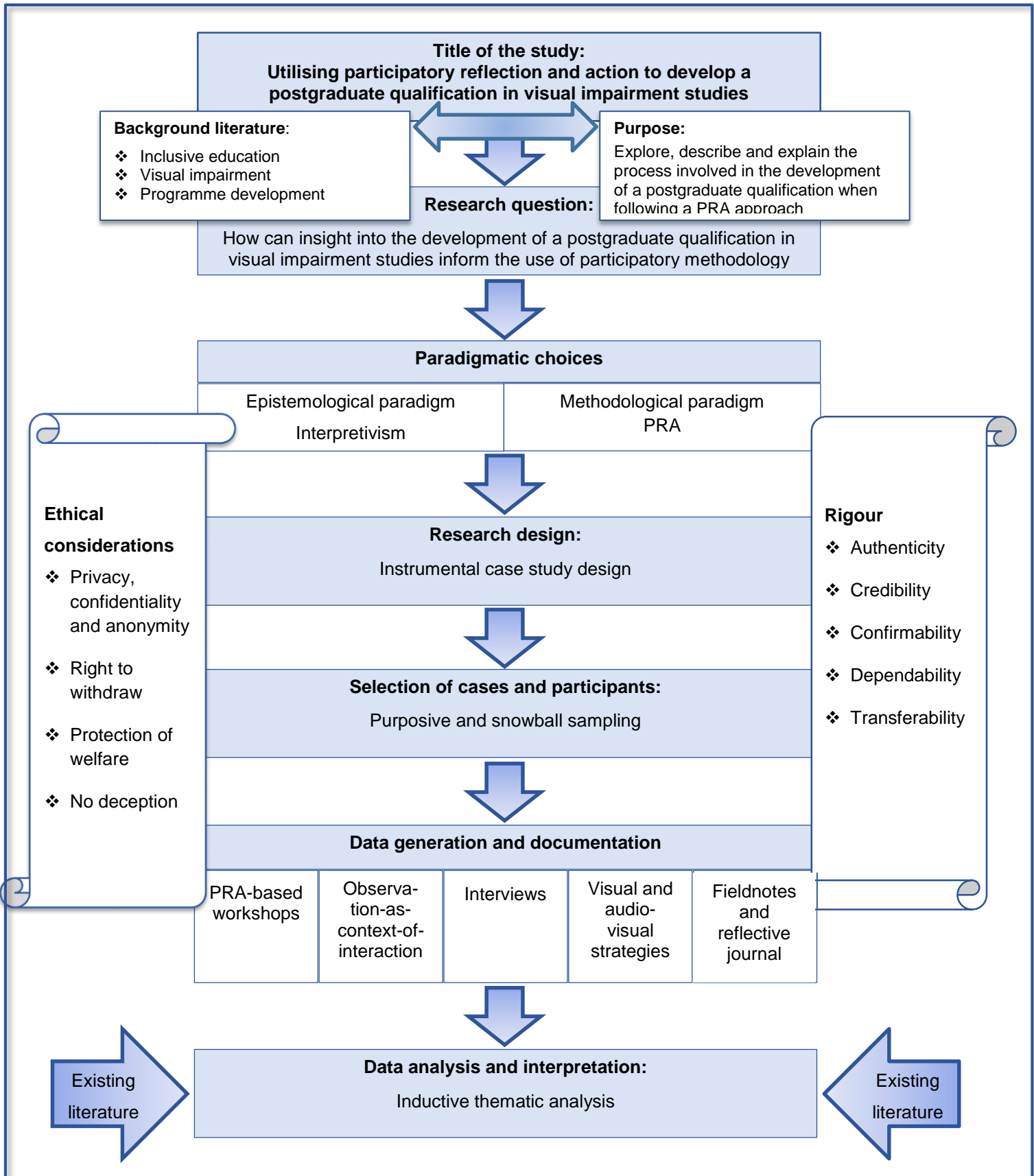


Figure 4.1: Overview of the research process

4.3.1 Research design

I utilised an instrumental case study design that allowed me to explore the way in which participants expressed their perceptions and ideas in informing the content of the postgraduate qualification on visual impairment (Baxter & Jack, 2008; Ferreira, 2006). Teacher participants reflected on their competencies and experiences in working with learners with visual impairment, in alignment with the principles of an instrumental case study design (Yin, 2004; Zucker, 2009). Research sites entailed the natural setting of teacher participants – their schools and classrooms – that are another aspect that is central to a case study design (Zainal, 2007). In following this design, I was thus able to observe and inquire about the experiences and suggestions of teachers implementing inclusive education policy in their schools/classrooms. In addition, stakeholders in the field of visual impairment participated in two colloquiums that were conducted at a central venue (Zucker, 2009), yet all these participants shared a similar background in terms of the visual impairment context.

An instrumental case study design focuses on gaining insight into a case being studied (Stake, 2005), thereby facilitating a researcher's understanding of a specific issue (Creswell, 2012). For my study, this design allowed me to explore the participants' understanding and implementation of inclusive education and their support to learners with visual impairment (Ferreira, 2006). In utilising the principles of participatory research, I could thus comprehend the participants' perceptions and experiences (Stake, 2005), adding to my understanding of their contexts and views.

My reason for choosing a case study design relates to the fact that this design enabled me to depict a certain situation (Zainal, 2007), while giving participants the opportunity to share their specific perceptions and experiences through a researcher's involvement and a detailed research report (this thesis). I was furthermore able to conduct research in a natural setting as the participants were not moved to another location for the study to take place (Patton, 2002), except in the case of the stakeholders that attended colloquiums at a central venue. Through the use of a case study design I was able to explain the intricacy of a real-life situation, although this cannot be generalised yet may have an impact on similar situations (Zainal, 2007). As I focused on a specific phenomenon involving purposefully selected participants, and in line with my selected epistemology, I did, however, not aim for generalisability.

In accordance with the principles of a case study design, I did not impose my knowledge on the participants regardless of how relevant it could have been. Throughout, the participants were taken as knowledgeable, with me merely interpreting their ideas and how they were informing the study (Yin, 2004; Stake, 2005). In line with the selected PRA approach I followed, participants were seen as experts (Yin, 2004), allowing us to generate data and examine the meaning of the data in collaboration with one another (Stake, 2010). In its nature, a case study design can assist with the interpretation of similar contexts when other research takes place, thereby implying application of some of the principles or findings of my study in similar studies in future (Stake, 2010).

Even though it was not my aim to generalise, the results I obtained have informed the module outline and content of the qualification that has been developed and may therefore enhance future teacher development (Silverman, 2000; Njie & Asimiran, 2014) as I obtained specific information from specialised people in the field. In response to the potential limitation associated with generalisability, I relied on crystallisation and used various methods to obtain detailed data and in-depth insight into the phenomenon under investigation (Zainal, 2007). In terms of the potential limitation associated with rigour (Stake, 2010), which may be questioned in case study research, I once again relied on various methods and prolonged engagement in the research field. Regular reflections and discussions with my supervisor, reflective notes as well as the process of embracing my involvement and guarding against my prior experiences influencing me, assisted me in attempting to ensure rigour (Cohen & Manion, 2007).

4.3.2 Selection of case and participants

Both the cases and teacher participants were selected purposefully (Maree, 2007). As the broader project that my study forms part of included the development of a qualification, we purposefully selected both full service and special needs schools in South Africa, inviting all teachers at these schools to participate. This approach was based on the belief that teachers in South African schools possess expert knowledge and are in the best position to inform the development of a South African qualification for teachers. In addition, expert stakeholders were selected by utilising a combination of purposeful and snowball sampling (Ratner, 2002). As such, a limited number of

stakeholders were initially identified based on their expertise. They in turn recommended others who they thought could benefit the study (Ratner, 2002). Subsequent to the recommended stakeholders being contacted, the sample number of stakeholders increased and consequently strengthened the data that was generated.

I perceived all participants to possess rich information, which enabled me to answer the research questions (Creswell, 2012; Maree, 2007) related to the potential use of PRA in developing a postgraduate qualification in the field of visual impairment (Creswell, 2012). Furthermore, as part of the broader project we explored how practising teachers implemented inclusive education policy and how they viewed the teaching of learners with visual impairment. As such, I had to select participants who possessed knowledge on this phenomenon.

Purposeful sampling implies that participants are not selected randomly or conveniently, but are carefully chosen to provide specific information (Seale et al., 2011). Due to the nature of purposeful sampling, qualities that may benefit a study are considered in selecting participants (Seale et al., 2011). When selecting the research sites and participants, I (in collaboration with the research team) thus specifically sought out sites and participants that would potentially possess information relevant to my study and research questions. Although specific sites (schools) and participants were selected, the aim was to understand the field of inclusive education, visual impairment as well as the use of PRA in obtaining information that could inform programme development, with the intention of obtaining diverse opinions that may also be representative (Flick, 2011).

As a first step, I obtained a list of all schools in South Africa from the national Department of Basic Education. In discussing the broader project with my supervisor and project leader we identified 17 schools as cases, situated in five different provinces, namely the Eastern Cape (EC), Free State (FS), Gauteng (GP), KwaZulu-Natal (KZN) and Limpopo province. As stated in Chapter 1, a nationwide invitation was extended to the provincial Departments of Education, inviting participation of the identified schools, and requesting departmental permission to proceed with arrangements for site visits. The first three provinces that responded and granted permission to conduct research in the relevant schools were then visited for data

generation while awaiting approval from the other two provinces. As stated, specific schools were purposefully selected from the various provinces. Three to four schools were identified in each of the provinces, two special needs schools and one or two full service schools that were supposedly implementing inclusive education policy or had been earmarked as inclusive schools. Photographs 4.1 and 4.2 capture some of the contexts of the research sites that were included, of which some were situated in



Photograph 4.1: School 10, KZN
(24 October 2017)



Photograph 4.2: School 3, Limpopo
(06 March 2018)

Following initial contact and communication with school principals, invitation letters, which included information on the purpose of the broader project, were sent to various schools. In the letters of invitation, principals were requested to indicate whether or not teachers were willing to participate. Appointments were subsequently arranged and sessions conducted with the participating teachers. In Table 4.1 an overview is provided of the selected schools and participating teachers.

Table 4.1: Selected cases and teacher participants

Province	Name of schools	Age group					Full service school	Special needs school	Total number of participants
		20-30	31-40	41-50	51-60	61-70			
Kwa-Zulu Natal	School 1	9	11	17	9	1	X		47
Kwa-Zulu Natal	School 2	3	1	2	3	1	X		10
Kwa-Zulu Natal	School 3			4	4			X	8
Kwa-Zulu Natal	School 4		9	7	4			X	20
Subtotal: Kwa-Zulu Natal									85
Gauteng	School 5		3		5	2		X	10
Gauteng	School 6	1	3	3				X	7
Gauteng	School 7	2	3	5	4		X		19
Gauteng	School 8	3	5	5	4		X		24
Subtotal: Gauteng									60
Limpopo	School 9			4	6			X	10
Limpopo	School 10		2	4				X	6
Limpopo	School 11		3	10	3		X		16
Subtotal: Limpopo									32
Free State	School 12	5		4			X		9
Free State	School 13			4	1			X	5
Free State	School 14	2	5	8	6	1		X	22
Subtotal: Free State									36
Eastern Cape	School 15	2	2	14	5		X		24
Eastern Cape	School 16		2	5	6			X	13
Eastern Cape	School 17		1	3	1			X	5
Subtotal: Eastern Cape									42

In addition to the teacher participants, expert stakeholders from several institutions participated, as summarised in Table 4.2. These participants were also selected

purposefully, based on their expertise and their possessing rich information. The selected expert stakeholders worked in the field of visual impairment and were thus supposedly able to provide ideas for the programme development, in terms of suitable module content.

Table 4.2: Expert stakeholder-participants

Institution	Number of participants	Area of Expertise
South African Council for the Blind	7	Experts in serving, supporting and facilitating the prevention of blindness, rehabilitation, community development, training and education of South African people with visual impairment.
Blind South Africa	6	Experts in training and orientation in Braille.
South African Library for the Blind	3	Braille consultant of South Africa, expertise in Braille training and Braille codes.
South African Guide Dog Association	2	An association that enhances the mobility and independence of people who have visual, physical and/or developmental needs.
South African Braille Authority	1	A standard setting body that promotes and advocates Braille and Braille-related matters in South Africa.
Private consultant	1	Ten years' experience as a school principal of a special school for the Blind and partially sighted.
School 4, School 6, School 9, School 13 (special needs schools) and School 18 (this school was not visited but 1 expert stakeholder participated)	13	Teachers at special needs schools for the Blind and partially sighted, with three of these teachers being blind themselves.
University lecturers and professors	10	Academics who have experience in working with students with visual impairment, with one lecturer being visually impaired himself.

The following selection criteria applied in selecting the teacher-participants:

- ❖ Participants had to be teaching at full service or special needs schools, or worked in the field of visual impairment in South Africa.
- ❖ Participants in special needs schools had to be working with learners with visual impairment.
- ❖ Participants had to be knowledgeable about visual impairment and/or the needs experienced by people who work with learners with visual impairment.
- ❖ Participants had to be able to understand and communicate in English.
- ❖ Participants had to be willing to participate and provide informed consent.
- ❖ Participants had to be available to participate in a series of PRA workshop sessions at their respective schools, followed by a member-checking colloquium at a central venue a few months later.

In purposefully selecting the participants, I could rely on the possibility of obtaining expert contributions from a group of participants with experience in the field (Flick, 2011). As a result, my knowledge as researcher did not have an effect, once again aligning with PRA, according to which participants are positioned as experts. Another advantage of purposive sampling relates to the fact that participants who have knowledge of the phenomenon that is explored, may save time. As researcher utilising purposeful sampling I knew what kind of information I was looking for and thus identified people who would possess such information, therefore limiting unnecessary time consumption. Flexibility is yet another advantage of purposeful sampling, enabling me to recruit additional participants until data saturation was reached (Flick, 2011). I recruited additional stakeholder-participants through snowball sampling, which entails identified participants recruiting others that could be beneficial for the research (Naderifar, Goli & Ghaljaei, 2017). As a result I was able to include participants that were not known to the research team or may have been difficult to reach without someone introducing us to one another (Flick, 2011).

Potential challenges associated with purposeful sampling include that a selected sample does not necessarily represent the broader population and that subjectivity may have an effect when individual responses are provided to certain questions

(Garfield, 2011). To this end, I relied on informal discussions with participants to explore their views and limit the influence of subjectivity (Atkins & Wallace, 2012). According to Cohen and Manion (2007), purposeful and snowball sampling, as a result, do not allow for generalisability of the findings. As stated previously, based on the interpretivist stance I took, my aim was not to generalise but rather to gain insight into the specific group of participants' experiences to understand the phenomenon under study (Thabe, 2015). As such, I did not experience this potential challenge as a limitation to the current study.

Finally, the selection of specific research sites could have posed a challenge considering the fact that I, as researcher, was not familiar with some of the areas, or schools, the specific contexts or how the schools function. In response to this potential challenge, I sought the advice and referrals from the relevant education departments in an attempt to eliminate the risk of selecting irrelevant sites. Another potential limitation of snowball sampling relates to recommended people not necessarily being willing to participate. I did, however, not experience this during my study, as all the recommended participants were keen to form part of the development of a qualification in their field of expertise, based on the perceived need for such a qualification (Garfield, 2011).

4.3.3 Data generation and documentation

As already mentioned, I relied on multiple data generation and documentation strategies. These are described in the sub-sections below.

4.3.3.1 PRA-based workshops

For the broader research project, 20 field visits were undertaken to 17 schools; I participated in 14, in five different provinces of South Africa. In addition, I co-facilitated a PRA-based workshop with expert stakeholders at a colloquium in Pretoria, Gauteng. Finally, six member-checking colloquiums were conducted, five with teachers in the five provinces and one with the expert stakeholders in Pretoria. The purpose of the member-checking sessions was to provide an opportunity to the participants to confirm or add to the initial data analysis that had been completed at that time.

In Table 4.3, I summarise the various field visits that were undertaken from October 2017 to April 2018. The purpose of the PRA-based workshops conducted at the schools was to obtain information on the teacher participants' understanding, needs and experiences of inclusive education policy and related implementation of the policy, more specifically in terms of the participants' implementation of inclusive education policy in teaching and their experiences in supporting learners with visual impairment. In addition, PRA-based workshops assisted me and the participants to brainstorm aspects related to the focus of the broader project collaboratively, including suitable content and a possible structure for the qualification that was to be developed.

Table 4.3: Overview of field visits and PRA-based workshops

Date	Schools visited	Duration of PRA-based data generation
24 and 25 October 2017	School 1 – KZN (S1)	Two days at each of the two schools, with a PRA-based workshop at each school. Approximately two hours each day.
	School 2 – KZN (S2)	
29 January 2018	School 3 – KZN (S3)	PRA-based workshop. Approximately two hours.
1 and 2 February 2018	School 4 – KZN (S4)	PRA-based workshop. Approximately two hours each day.
5 February 2018	School 5 – GP (S5)	PRA-based workshop. Approximately two hours.
7 and 8 February 2018	School 6 – GP (S6)	PRA-based workshop. Approximately two hours each day.
13 and 14 February 2018	School 7 – GP (S7)	PRA-based workshop. Approximately two hours each day.
14 February 2018	School 8 – GP (S8)	PRA-based workshop. Approximately two hours.
6 March 2018	School 9 – Limpopo (S9)	PRA-based workshop at each school. Approximately two hours.
	School 10 – Limpopo (S10)	
7 March 2018	School 11 – Limpopo (S11)	PRA-based workshop. Approximately two hours.
13 March 2018	School 12 – FS (S12)	PRA-based workshop. Approximately two hours.

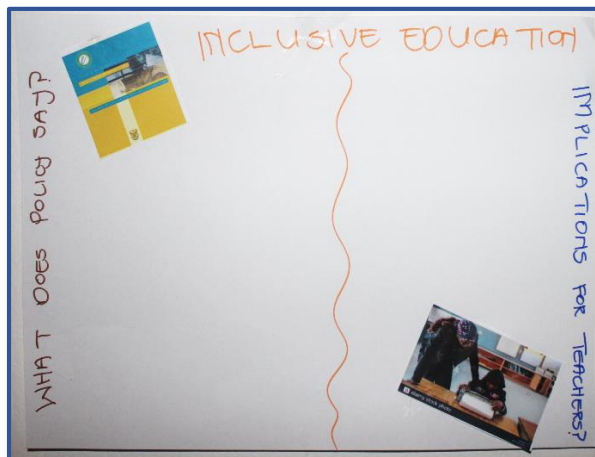
Date	Schools visited	Duration of PRA-based data generation
14 March 2018	School 13 – FS (S13)	PRA-based workshop. Approximately two hours.
15 March 2018	School 14 – FS (S14)	PRA-based workshop. Approximately two hours.
12 April 2018	School 15 – EC (S15)	PRA-based workshop. Approximately two hours.
16 April 2018	School 16 – EC (S16)	PRA-based workshop. Approximately two hours.
17 April 2018	School 17 – EC (S17)	PRA-based workshop. Approximately two hours.
25 April 2018	Not applicable – expert stakeholders in the field of visual impairment met at a central venue in Pretoria, Gauteng	Five hours

As part of the PRA-based activities that were facilitated with teachers, they were required to complete posters (PRA-matrices) and document their ideas. The posters contained prompts, which were explained to the participants, focusing their discussions on specific areas, against the broader purpose of the project. Reflection on existing teacher competencies and skills formed part of all PRA-based sessions and discussions, thereby indirectly contributing to teachers' further implementation of inclusive education policy as a result of their sharing their ideas with others functioning in similar contexts. As such, PRA-based workshops allowed participants to co-construct knowledge, and voice and interpret the support that teachers could benefit from when teaching learners with visual impairment.

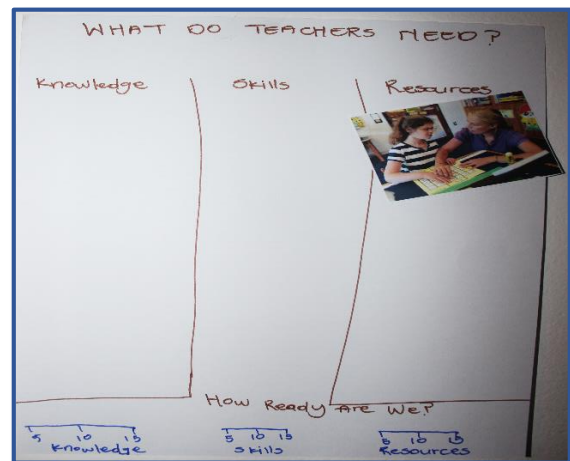
Participants worked on one poster at a time in small groups of four to six. Even though the participants were given leverage in terms of how they wanted to form their groups, they were encouraged to form groups that would represent teachers from different learning areas, grades and/or phases so that the responses could be inclusive and to an extent, more representative than when forming homogenous groups. Subsequent to the small group discussions and responding to the prompts provided, the various groups of participants presented their ideas to the larger group for further input and discussions.

The first PRA-based poster and discussion focused on teachers' broad knowledge and understanding of inclusive education policy (White Paper 6) and the implications

for them as teachers (Poster 1, Photograph 4.3). In addition, their levels of readiness to implement the said policy in their schools were explored, more specifically when teaching and supporting learners with visual impairment. For this purpose, their needs were discussed, in terms of knowledge, skills and resources required for implementation of inclusive education policy (Poster 2, Photograph 4.4).

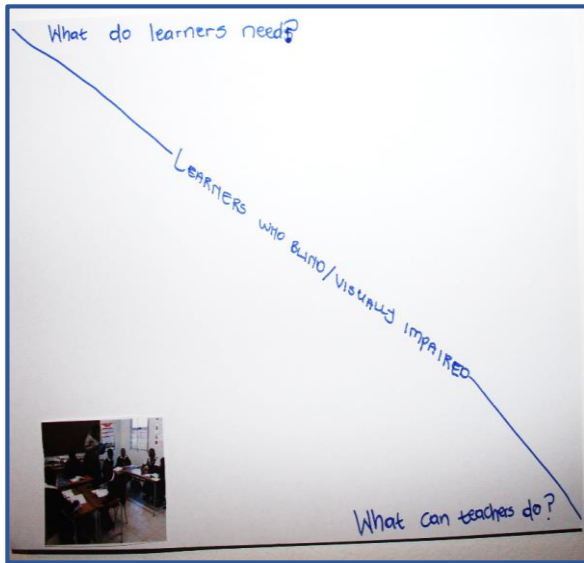


Photograph 4.3: PRA-poster on inclusive education policy and its implementation (23 October 2017)

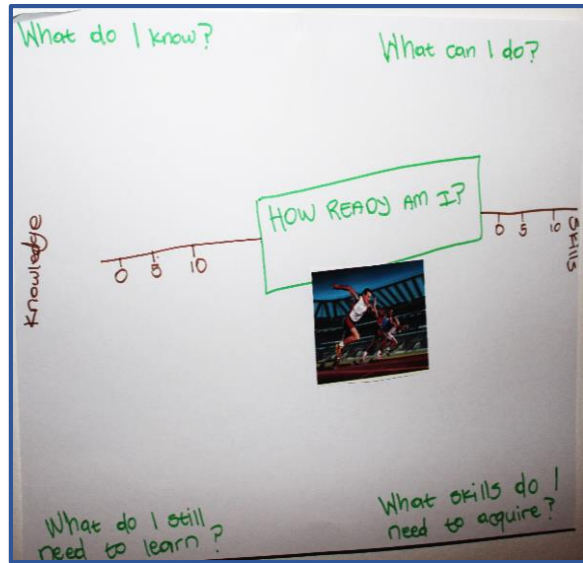


Photograph 4.4: PRA-poster on required knowledge, skills and resources to implement inclusive education policy (23 October 2017)

During the second set of prompts, teacher participants' perceptions were explored in terms of the perceived needs and expectations of learners with visual impairment. To this end, the needs of learners with visual impairment as well as possible strategies for teachers to support these learners were discussed and presented by the teacher participants (Consult Photograph 4.5). In exploring the teaching and supporting of learners with visual impairment further, teacher participants were requested to elaborate on their knowledge and skills in terms of their current status as well as their requirements for the future. They were then asked to rate their levels of readiness to teach and support learners with visual impairment on a scale of 0 to 10, with 0 being not ready and 10 indicating strong readiness (Consult Photograph 4.6).

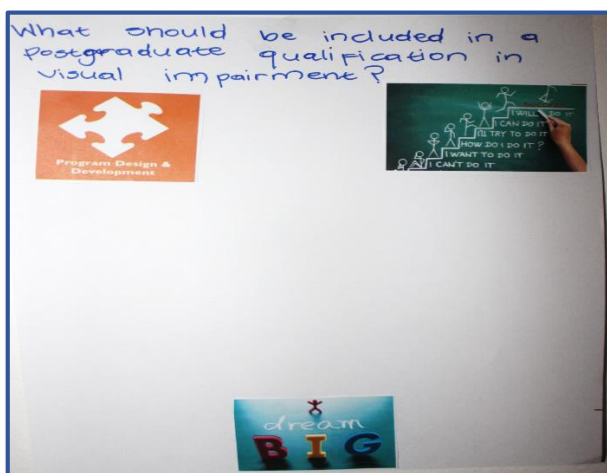


Photograph 4.5: PRA-poster on the needs of learners with visual impairment and how teachers may respond to such needs (23 October 2017)



Photograph 4.6: PRA-poster on teachers' knowledge, skills and levels of readiness to teach and support learners with visual impairment (23 October 2017)

Finally, teacher-participants were requested to discuss the development of a postgraduate qualification in visual impairment, more specifically in terms of suitable content for such a qualification. The poster that the teacher participants completed for this part of the data generation process is captured in Photograph 4.7. Photograph 4.8 shows a PRA-discussion.



Photograph 4.7: PRA-poster on suitable learning content for the proposed postgraduate qualification (23 October 2017)

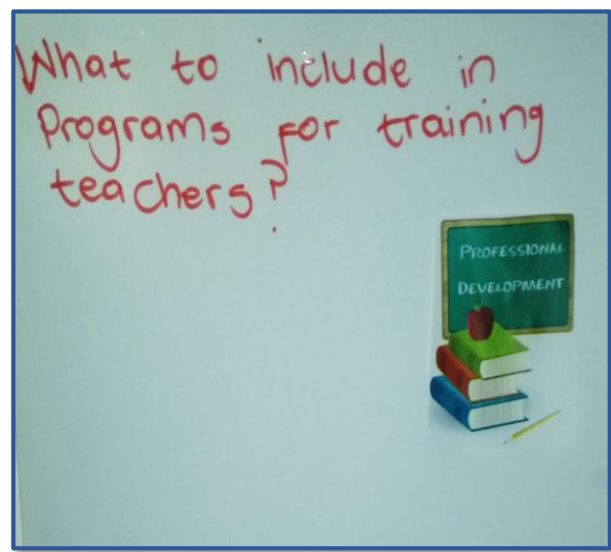


Photograph 4.8: PRA-based small group discussion (25 October 2017)

In a similar manner, expert stakeholders engaged in small group PRA-based activities and discussions, guided by prompting questions. As with the teacher-participants, the stakeholders first discussed topics in small groups and then presented their ideas to the larger group. The questions and prompts posed to the expert stakeholders differed slightly from those used with the teacher-participants, as a stronger focus was placed on the outline of possible module content. Expert stakeholders were thus only prompted to share their ideas on the needs of learners with visual impairment, according to their experiences in the field, and what could be included in the qualification that was being developed. Photographs 4.9 and 4.10 capture the matrices used with expert stakeholders.



Photograph 4.9: PRA-poster on the needs of learners with visual impairment (22 April 2018)



Photograph 4.10: PRA-poster on possible content for a qualification in visual impairment (22 April 2018)

As already indicated in the previous chapter, PRA research implies several advantages. I was, for example, able to work actively and collaboratively with the participants in gaining insight into the phenomenon under study. These discussions implied the possibility of transformations that can change people's lives (Creswell, 2012), in this case changed classroom practice. More specifically, PRA allowed for joint problem solving and finding solutions among participants, as they shared ideas for working with learners with visual impairment and implementing inclusive education policy (Stringer, 2007). As a result of the PRA-based sessions, participants were thus able to learn from and even assist one another in terms of what teachers can do in the classroom to best serve, teach and support learners with visual impairment.

The possibility of participants finding it hard to take the lead and researchers being sceptical about handing over the stick may be viewed as potential challenges when conducting PRA research. In this study, participants were trusted to be experts in their field and in a good position to take on a leading role (Chambers, 2008).

Another challenge often associated with PRA relates to group dynamics and researchers capturing and managing such dynamics. To this end, caution was taken to encourage the positive contribution of all participants during small group discussions. In addition, audio-visual techniques were used to capture all sessions. Although not everything and only small group discussions could be captured, the research team took note of what appeared relevant to capture, and made field notes for this purpose (Ladkin, 2011). Where some participants seemed withdrawn, researchers encouraged them to participate and redirected questions to them.

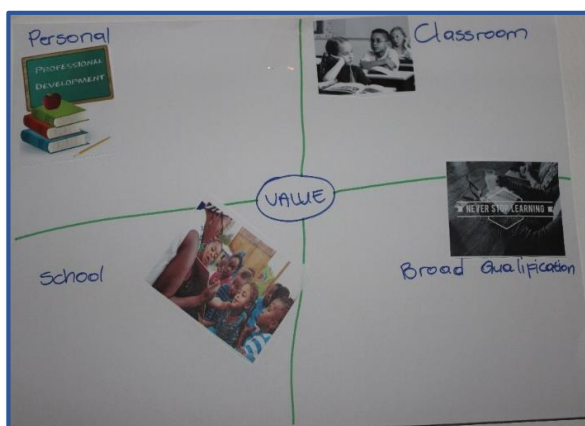
Finally, the time allocated for the PRA-based workshops occasionally posed a challenge as some of the teacher participants seemed to be tired after school, with a few being reluctant to stay longer than the school day. In response, the research team emphasised the importance of their contributions and the purpose and potential value of the research project. In such cases, the time allocated to individual PRA-based activities was occasionally limited and had to be managed with care, without jeopardising the purpose of any session or discussions.

For member-checking, five colloquiums were conducted with teachers and one with the participating expert stakeholders. All teacher participants were invited to a colloquium in their province, which took place on Saturdays, as captured in Table 4.4. The expert stakeholder colloquium was conducted at the same venue as the first colloquium, on a week day. Although attendance was lower than expected in some of the provinces, the teachers who attended the colloquiums were in a position to confirm that the proposed programme content had captured their initial contributions.

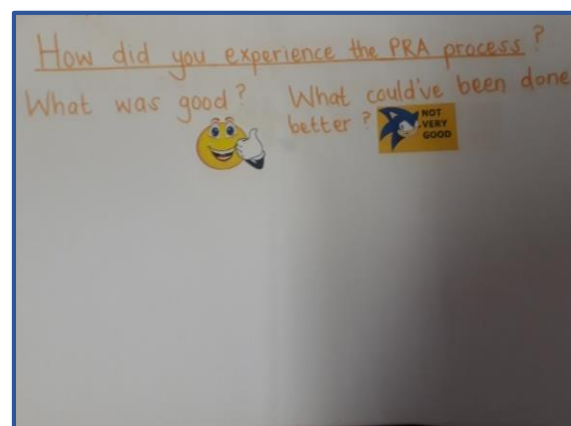
Table 4.4: Member-checking schedule

Date	Province/Venue
9 June 2018	Free State – Bloemfontein
	KwaZulu Natal – Pietermaritzburg
21 July 2018	Limpopo – Polokwane
	Eastern Cape – Mthatha
28 July 2018	Gauteng – Pretoria
27 September 2018	Expert stakeholders – Pretoria

During the member-checking colloquiums with teachers, participants were presented with the proposed structure of the postgraduate qualification that had to be developed in terms of the proposed modules and module content (Consult Appendix A), following analysis of the generated data. Participants were then requested to confirm and/or provide further input for the envisioned qualification. In addition, reflective discussions were facilitated on the participants’ experiences of their involvement in PRA-based activities, research and the process of conceptualising a qualification for teachers. These discussions were directed to focus on the potential value of their participation on a personal level, for the classroom, school and expertise levels of teachers, as experienced by the participants. Finally, teacher participants were asked to discuss the benefits and areas of improvement in terms of the PRA-process they had been involved in. Photographs 4.11 and 4.12 capture the matrices used for the discussions that formed part of the member-checking sessions.

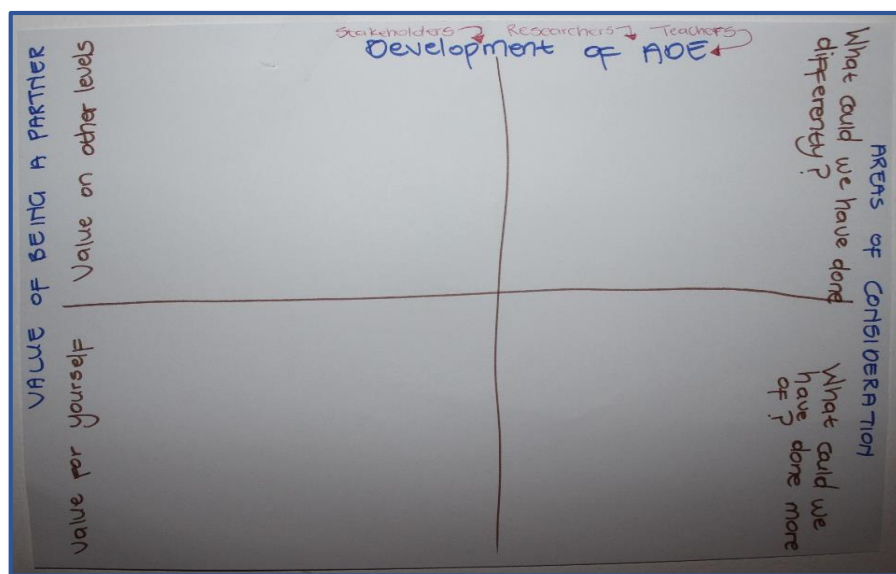


Photograph 4.11: PRA-poster on the value of the PRA-approach followed in the project (7 June 2018)



Photograph 4.12: PRA-poster on the experiences of participants in being involved in a PRA-based project (7 June 2018)

A similar member-checking session was facilitated with the expert stakeholders, in which they were asked to reflect on their participation in the PRA-study. Expert stakeholders were specifically asked to reflect on their perceived contribution of PRA on personal and other levels, and also to indicate what could have been done differently in exploring their views and ideas following such an approach. As in all PRA-based discussions, these reflections were discussed and captured in small groups, and then presented to the larger group for further input. Photograph 4.13 depicts one of the PRA-matrices that were completed by the stakeholder-participants during the member-checking colloquium.



Photograph 4.13: PRA-poster for member-checking with stakeholder-participants (25 September 2018)

4.3.3.2 Observation-as-context-of-interaction

As part of the current study and the broader project that it formed part of, I observed participants and their interaction during all PRA-based sessions as well as some of the teacher-participants in their classrooms. In relying on observation-as-context-of-interaction (Angrosino & Mays de Pérez, 2000) I was able to develop “membership” in the groups of teachers and stakeholders whose contexts I observed. In this way, observation enabled me to generate data on how the participants related to their peers and learners, as well as on their views and implementation of inclusive education policy.

In essence, observation allowed me to study the participants and how they functioned and interacted in their natural settings (De Vos, 2002). Observation therefore provided me with a so-called “insider perspective of the group dynamics and behaviours” (Maree, 2007, p. 84) that occurred during PRA-based sessions and in the classrooms of the teachers who participated. In this way, observation-as-context-of-interaction enabled me to enter the world of the participants in a non-intrusive manner and gain insight into the interactions among them and in some cases the interaction with learners with visual impairment in the classroom (Marshall, 2006).

More specifically, I was able to observe some teachers’ interaction with learners and the adaptations made in their classrooms in accommodating learners with visual impairment or other special needs. I could also observe the assistive devices and supportive material and resources used by teachers when accommodating learners with visual impairment. In the participating special needs schools for the blind and partially sighted, these resources and adaptations, for example, included large font material and enlarged pages (A4 to A5 format) for partially sighted learners. Blind learners were in some cases provided with Braille and apex machines.

I captured the details of the sessions and dynamics I observed in the form of field notes (Creswell, 2009). Without my interference as researcher, I thus had the opportunity broadly to perceive the participants and their views on the phenomenon under study. Furthermore, I could interact with the participants and confirm some of my observations in conversations with them, based on my decision to employ observation-as-context-of-interaction (De Vos, 2002). As already indicated, non-verbal interactions as well as participant behaviour could thus be observed in natural settings (Burton & Bartlett, 2009).

A potential challenge that is often associated with observation relates to accuracy when a researcher records what is observed. To this end, I complemented my observations with other methods of data generation, including audio-visual strategies with recordings and photographs allowing me to refer to a session when needed (James, 2007). Due to the fact that the current study, as part of a broader project, involved a team of researchers, we could engage in discussions on our observations, thereby ensuring that our experiences were authentic (Marshall, 2006). Even though observation cannot result in generalisable findings, this was not my aim, as previously

indicated. I rather focused on gaining insight into the specific experiences and views of the participating teachers and expert stakeholders in the field of visual impairment (De Vos, 2002).

Another potential limitation often related to observation concerns the building of rapport. However, I did not experience this challenge as the PRA-based activities of my study as part of the broader project assisted us in building rapport fairly quickly and maintaining relationships of trust as the study progressed. Finally, participants may modify their behaviour once learning that they are being observed. In my study, I did not experience this to be the case as the participants spontaneously contributed and provided clarity when required (Creswell, 2012), probably due to the participatory nature of the study.

4.3.3.3 Field notes and reflective journal

In recording and documenting the observations, I relied on field notes and a reflective journal (Consult Appendix B), where I could capture, interpret and draw conclusions of interactions in my own words (Wolfinger, 2002). My field notes contain records of the processes involved in the sessions I observed, as well as of interactions among the participants and their interactions with the researchers (Banks, 2011). My field notes furthermore include detail on the experiences I had in the field, the questions I needed clarity on to broaden my understanding of the participants' experiences, and additional sources I consulted as a result of the study's progress and the insight I obtained (Ortlipp, 2008).

In compiling field notes, I relied on the salient hierarchy strategy proposed by Emerson, Fretz and Shaw (2001), as this approach allowed me to decide what was worthy to take note of, based on the purpose of my study (Mack, Woodsong, MacQueen, Guest & Namey, 2011). The fact that I entered the research field with some background knowledge in the field of study may have had an influence on the notes I made, due to my beliefs possibly influencing what I noticed in the research field, and what I chose to pay attention to and record as part of my field notes (Wolfinger, 2002). I aimed to avoid this challenge through reflexivity and by comparing my notes with those of the other research team members. Instead of defining every event that occurred, I primarily paid attention to aspects that I thought were beneficial

to my study and could assist me in addressing the research questions (Mack et al., 2011).

As alluded to in Chapter 1, I compiled both descriptive and reflective field notes. The descriptive field notes captured what I observed and experienced in the field, and include notes on the activities, PRA-based processes and the physical backgrounds and dynamics I observed among participants (Mack et al., 2005). The reflective field notes, recorded in my reflective journal, contain my thoughts on emerging themes, how the experiences of participants were connected, and how I gave meaning to certain events based on my personal experiences of the research process and my interaction with the participants and my co-researchers (Mack et al., 2005).

I furthermore relied on my reflective journal to record and scrutinise any potential biases and subjectivities concerning my study and the process of data generation (Harrison, MacGibbon & Morton, 2001). As previously indicated, I constantly guarded against and reflected on my own assumptions in an attempt to ensure that the study and my reflections were not influenced by me or my preconceived ideas (Sanjek, 1990). To this end, the reflective journal assisted me in recording my questions and thoughts about the study, also reflecting on the progress of the research and the insight I obtained while in the field (Mack et al., 2011).

In summary, both the field notes and reflective journal recordings allowed me to capture open-ended ideas (James, 2007), with access to what I had observed and the leverage to refer to my notes and observations of a session when required (Creswell, 2009). In compiling the field notes and reflective journal recordings, I had the opportunity to correct or elaborate on my observations at a later stage if necessary (Newbury, 2001). I was also able merely to capture some keywords of what took place while in the field and then expand on these at a later stage (Mack et al., 2011). Even though it is difficult to record exactly what is said while in the field, the use of keywords assisted me to recall what had taken place at a particular time and then elaborate on my notes at a later stage (Ortlipp, 2008).

4.3.3.4 Semi-structured individual interviews

Individual interviews provide researchers with the opportunity to interact with participants and gain clarity when something is unclear. As interviews are flexible and

generally follow a dynamic process, immediate follow up is possible if something is unclear (Atkins & Wallace, 2012). For my study, I conducted nine individual interviews outlined in Table 4.5 with teachers and stakeholders that could not attend the data generation sessions/colloquiums but seemingly possessed valuable information that could inform my study. Interviews were conducted at the preferred location of the participants and lasted between 10 and 25 minutes each. I asked all participants more or less the same questions than the ones their counterparts discussed during the PRA-based sessions. Throughout, I encouraged the interviewees to share their experiences and expertise openly (Kvale, 1996). The interview guide I relied on is included in Appendix C.

Table 4.5: Participants involved in individual interviews

Interviewee	School/institution	Occupation	Date of interview
I1 ⁶	Department of Basic Education – District level	Counselling psychologist	22 February 2018
I2	Department of Basic Education – District level	Learning Support Advisor (LSA) – for primary schools	21 February 2018
I3	Department of Basic Education – District level	Learning Support Advisor (LSA) – for high schools	22 February 2018
I4	Department of Basic Education – District level	Social worker in the inclusive education section	21 February 2018
I5	School for the Blind and partially sighted	Grade 10 - 12 tourism teacher	7 February 2018
I6	School for the Blind and partially sighted	Grade 10 - 12 Computer Application Technology (CAT) teacher	7 February 2018
I7	School for the Blind and partially sighted	Occupational therapist	8 February 2018
I8	Full service school	Grade 2 teacher with a learner with visual impairment in her class	20 February 2018
I9	Full service school	Member of the School-based support team (SBST)	20 February 2018

⁶ I = Interviewee, followed by a number, for ease of reference to the different interviews later on in this thesis.

During individual interviews with the teachers and stakeholders, I was able to explore their experiences and perceptions, yet also clarify things that I was uncertain of (Blaxter, Hughes & Tight, 2006). To obtain this information, I had to ask relevant questions and maintain focus during interview conversations, being guided by the research questions and purpose of my study. Throughout, I encouraged the participants to share openly their ideas and any information that could assist me in addressing my research questions, or could add to the possible content of the postgraduate qualification that was being developed.

An advantage of individual interviews is that, if participants do not understand certain questions, these can be clarified to obtain the required information (Berg, 2007). Flexibility can furthermore allow participants to add additional valuable information that may not initially have been asked as the interview progresses. In conducting semi-structured interviews, I was able to change the order of the questions as I saw fit in support of the conversational nature of such interviews (Corbetta, 2003). Furthermore, I could gain insight into how participants view the world and the occurrences around them through conversation and follow-up questions (Cohen et al., 2011).

However, responses to interview questions can be subjective and affect the correctness of the data generated (Gillham, 2000). Some participants may also not be open about their experiences even though I did not observe any such cases in my study due to sound relationships of trust being established prior to commencing with the interviews. As soon as the participants were informed of the intention of the study, they seemed committed to providing relevant information and making a contribution to a qualification that may benefit people in their field in future (Corbetta, 2003). As interviews may be time-consuming, I thoroughly prepared for these data generation sessions and was guided by the interview schedule to remain focused and avoid lengthy discussions. Additionally, as some of the participants seemed concerned that the interviews could expose them as being either knowledgeable or not, I reminded them that the interviews were not intended to test their knowledge but had the purpose of exploring their perspectives and unique experiences and ideas. Once being reassured of the purpose of the interviews, participants contributed spontaneously and freely.

4.3.3.5 Visual and audio-visual data generation and documentation strategies

I relied on visual and audio-visual strategies to capture the occurrences and my observations of the research process (Banks, 2011). For this study, visual and audio-visual data included PRA-based workshop posters (matrices) (Consult Appendix D) compiled by teacher and stakeholder-participants, photographs of available resources and observations at the schools we visited (Appendix E). All individual interviews were recorded with a voice recorder. All recorded discussions were in turn transcribed verbatim (Consult Appendix F) for data analysis purposes.

Visual and audio-visual techniques made it possible to revisit the data at later stages as needed, and gradually to come to certain realisations, especially during the data analysis process. I could also verify certain things that I could have missed during field work observations. While the participants shared their views with the rest of the group, I was thus able to capture the proceedings with ease by capturing key words, without being concerned to write down everything as it occurred, due to the possibility of revisiting the events at a later stage (Whiting, 2008).

I therefore used visual and audio-visual techniques in support of other data generation strategies to gain an in-depth understanding of the participants' experiences and ideas (Bailey & McAtee, 2003). As such, visual and audio-visual data allowed me to reflect on the data generation occurrences and relive moments that occurred at the research sites (Bailey & McAtee, 2003). In this way, these techniques did not merely provide me with the participants' perspectives but also revealed the context of the research sites (Byrne, 2014). In addition, my biases and subjectivity could be limited through the use of these techniques, which in turn assisted me in reporting on the findings of my study in a scholarly way that is evidence-based. By including visual and audio-visual methods, I was able to interact with the participants and my co-researchers in a less distractive way, allowing for free flow interaction (Byrne, 2014).

A potential challenge sometimes mentioned when utilising these techniques relates to participants possibly denying the use of these strategies to protect their identity, or adjusting their behaviour when feeling uncomfortable with being recorded. For this purpose, all participants in the current study were briefed about the use of visual and audio-visual techniques beforehand and had the choice of their identities being disguised (or not), thereby giving their consent (Creswell, 2009). Firm relationships of

trust and PRA methodology furthermore supported spontaneous contributions, with participants seemingly being at ease with being photographed and recorded. As a result, utilisation of these methods provided me with good evidence of what had occurred in the field, with the option of revisiting this during analysis (Chambers, 2008; Creswell, 2014). Furthermore, visual and audio-visual techniques supported the research team in collaboratively constructing knowledge of the participants' experiences and context (Byrne, 2014). This collaborative effort addressed the potential challenge of possible misinterpretation of observations and recordings when utilising visual and audio-visual strategies. In further support, member-checking formed part of the research process, enabling me to verify my recording of observations and implement changes where needed (Banks, 2011). Final potential challenges that I considered related to the available guidelines when utilising visual and audio-visual techniques or to technology failing the researcher (Bailey & McAtee, 2003). I did not experience any of these challenges during my study, even though back-up recordings were made as precautionary measure.

4.3.4 Data analysis and interpretation

I completed inductive thematic analysis, applying Strauss and Corbin's (1998) guidelines to identify, analyse, and report patterns in the data that had been generated. By relying on inductive thematic analysis, I was able to structure the data and describe it in detail (Braun & Clarke, 2006), as well as interpret different aspects related to the research topic (Braun & Clarke, 2006). As a result, I was able to report on the participants' perceptions, experiences they had and meanings they attached to experiences (Strauss & Corbin, 1998). In this way, inductive thematic analysis supported me in understanding the participants' views and meaning making of their contexts and profession, being that of working with learners who may be visually impaired.

Braun and Clarke (2006) provide specific steps when conducting thematic analysis, which I followed. Accordingly, the first step entailed that I familiarised myself with the data (recordings, transcripts, visual data, field notes and reflective journal) by engaging with it, reading through the written data, and then rereading and noting initial ideas in the data. As a result, I generated initial codes based on the features and recurring ideas I identified across the data set, using colour coding as illustrated in

Appendix G. For the third step of analysis, I grouped the initial codes into potential themes (Consult Appendix H). Themes were reviewed by checking whether or not identified options were in relation to the coded extracts as well as the entire data set while I extracted codes to relevant themes (Consult Appendix I). Finally, I named and described the themes to refine the details of each theme and also added sub-themes, clearly naming and defining each theme and sub-theme (Consult Appendix J). In an attempt to limit the potential effect of bias, I consulted and discussed my analysis with my supervisor and co-researchers at regular intervals (Creswell & Clark, 2011; Terre Blanche, Durrheim & Painter, 2006).

Inductive thematic analysis seemed suitable for the current study and broader project, as it aligned with the type of data that was generated. Through generated data, and by working together with other researchers, I managed to identify prevailing themes and could, as a result, develop notions of possible relationships between the experiences and ideas of different groups of participants (Thorne, 2000). Based on the patterns identified in the participants' responses, I was able to capture significant inclinations in the data that related to and enabled me to answer my research questions (Braun & Clarke, 2006). I was furthermore able to arrange and break the data down into manageable units and describe it in a way that can be understood by the reader of this thesis (Patton, 2002).

As mentioned earlier, participants were consulted for the purpose of member-checking after the initial phase of data analysis. To this end, my co-researchers and I presented the preliminary results to the participants, asking them to confirm the themes and sub-themes we identified, or to add or rectify where needed. For this purpose, I summarised the themes and sub-themes in a systematic way before presenting these with the aid of PowerPoint presentations (Consult Appendix K for an example) for the participants to comment on (Creswell, 2009; Mouton, 2001; Patton, 2002).

As thematic analysis allows for flexibility during data analysis (Braun & Clarke, 2006), I was able to determine themes and sub-themes as they came to the fore in dialogue with my supervisor, yet with the option of refining these at later stages (McLellan, MaCQueen, Neidig, 2003). I was furthermore able to highlight certain variations and resemblances in the generated data (Thorne, 2000), through my analysis of multiple

sources and data sets (Alhojailan, 2012). By analysing different data sets and sources, the rigour of this study could be enhanced (Alhojailan, 2012).

On the downside, thematic analysis implies the possible challenge of being labour and time intensive when having to categorise large amounts of data (Braun & Clarke, 2006). Even though I experienced this challenge due to the magnitude of data generated as part of this study and the broader project, I allowed enough time for transcriptions of the raw data and the analysis process itself. In support, a consultant was appointed to transcribe the data and several research team members assisted with data analysis during the first phase of analysis. Reflection and my field notes assisted me in carefully categorising the generated data and checking my initial analysis against that of my supervisor and co-researchers (McLellan et al., 2003). As an interpretivist researcher I was aware of the fact that the findings could not be generalised; however, with the thick descriptions included in this thesis, accompanied by direct quotations, researchers and practitioners may possibly rely on the trustworthiness of the findings and use their own judgement to transfer the findings to similar studies, as they see fit (Vaismoradi et al., 2016).

4.4 ETHICAL CONSIDERATIONS

In conducting this study, I applied the relevant ethical guidelines when undertaking research that involves human participants (Ethics Committee of the Faculty of Education, 2018). Ethical clearance was obtained for the broader research project from the Ethics Committee of the Faculty of Education at the University of Pretoria prior to us entering the research field (UP 17/06/01), which included me as researcher. In addition, permission was obtained from five Departments of Education (representing the five provinces that were visited) to conduct research in schools in the respective provinces, and later (verbally) from the relevant school principals. Consult Appendix L for the relevant permission letters to conduct research in schools in South Africa.

4.4.1 Informed consent and voluntary participation

From the onset it was important to inform participants of what their participation in the research project would entail, what the study was about and what its purpose was, and what the consequences and benefits might be (Wiles, 2012). In this study, participants were thus provided with appropriate and adequate information about the

planned research process, what was aimed for and what the anticipated outcomes entailed (Jelsma & Clow, 2005). Participants were furthermore informed of their right to withdraw from the study at any time, without giving reasons for such a decision or being discredited in any way (De Vos, 2002; Halai, 2006). After participants had been informed of and provided with sufficient detail about the broader project, they had the opportunity to ask questions to make an informed decision about participation (Dongre & Sankaran, 2015).

Participants were requested to sign an informed consent form (Consult Appendix M), which includes the details of the research study in terms of its background, purpose, risks and benefits. In so doing, participants agreed to participate voluntarily (Creswell, 2009). Due to the fact that photographs were taken during the course of the research, participants were specifically requested to indicate whether or not they preferred their faces to be shown when reporting on the findings of the research. For participants who chose not to have their faces revealed, photographs were taken from behind or edited to disguise their faces for reporting purposes. Only a few participants preferred this option, with the majority indicating a preference to be identifiable when including photographs in research reports. Even though the informed consent letter included the relevant information on the study, participants were invited to ask questions for clarity whenever needed.

4.4.2 Obtaining consent from participants who are blind

As some of the stakeholder-participants were blind or partially sighted, specific procedures had to be followed to obtain informed consent from them. These participants had sighted assistants with them, who were regarded as legally authorised representatives (LAR) who were present and could read and further explain the consent form to the participants who could not do so themselves (University of Wisconsin, 2007). Sufficient time was provided for questions to be asked and clarity to be provided where requested.

As such, background on the request for consent was explained orally to the participants by the research team, at the start of the stakeholder colloquium, providing the necessary information as explained in the previous section. In addition, the informed consent letter was then read to the participants by their representatives, in the researchers' presence. In the case of participants who were blind, their

representatives signed the consent forms on their behalf (Saleh, 2004; University of Wisconsin, 2007). In the case of partially sighted participants, some used their magnifying glasses and other supportive devices to read the consent form. Sufficient time was allowed for all participants to review the form and subsequently sign and submit the form to one of the research team members (Saleh, 2004; University of Wisconsin, 2007). Participants would have been provided with copies of their signed consent forms on request, even though no such requests were received.

As with all other participants, the research team maintained the highest legal, professional and ethical standards when interacting with the participants with visual impairment (Dench, Iphofen & Huws, 2004). Throughout, all participants were protected from harm and respected (Dench et al., 2004). To this end, the research team ensured that the research process protected the participants' dignity, human rights and diversity, and that it upheld social justice while avoiding any possible harm (Dench et al., 2004).

4.4.3 Privacy, confidentiality and anonymity

All generated data is kept private and securely stored, at the University of Pretoria (Dongre & Sankaran, 2015). Data was shared among members of the research team only, with electronic data being password protected (De Vos, 2002). The personal identities of the participants were kept private and the data generated was carefully handled and not disclosed to any third party. Data is to remain in safekeeping in a locked cabinet for a period of 15 years.

Additionally, to ensure anonymity, during the progress and reporting of the study I ensured that participants' identities were disguised on the pictures and that for all participants who did not want their identities to be revealed their names were not mentioned (De Vos, 2002). However, as most participants in this study indicated that their identities could be revealed, as is often the case in PRA-research where positive outcomes occur or where participants contribute to solutions to problems, their faces were not disguised but their names were still kept private. It was important for me as researcher to create a safe space for the participants where they could freely discuss sensitive information, knowing that their contributions would be treated in a confidential manner.

From the onset, participants were made aware of the importance of adhering to the principle of confidentiality as they would be sharing information with others in a group setting. Participants were thus urged to respect one another's ideas and perspectives during their participation (Wiles, 2012). Even though I cannot guarantee that the participants kept discussions confidential, firm relationships of trust may have supported their adherence to this request.

4.4.4 Protecting participants from harm

I attempted to protect the participants' welfare at all times by guarding against any infliction of either a physical or psychological nature from occurring. As researcher I thus remained aware of possible harm that could have occurred and guarded against this. Even though no harm was done and no participant seemed distraught at any time, I would have dealt with such incidences in a professional and confidential manner (Rubin & Babbie, 2008), by debriefing the participant and then referring him/her for professional support (Halai, 2006; De Vos, 2002).

To protect the welfare of the participants further, I conducted member-checking in support of rigour and the trustworthiness of the findings of this study. I also protected the participants from being negatively affected by data analysis or the reporting of my findings by not divulging their identities and completing a series of member-checking sessions. I did not use any derogative terms at any time; equality was ensured and opportunities were provided to all participants as a sign of respect to them and the research process itself (Orb, Eisenhauer & Wynaden, 2000).

4.4.5 Maintaining trust and avoiding deception

To avoid deception, participants were provided with information on the nature of the study and what it aimed to achieve as well as the possible implied consequences and potential benefits. To this end, I remained honest with the participants, partly to form and maintain firm trusting relationships and secure their participation, yet also for them to be able to make informed decisions. In support of this, I did not withhold any information about the study from the participants (Rubin & Babbie, 2008). Throughout, it was crucial for the participants to trust me as researcher as well as for them to trust the process and realise that their participation would not put them at risk in any

manner. As such, the provision of comprehensive and authentic information was necessary at all times.

I furthermore did not mislead participants with regard to the kind of data required from them, the contents and purpose of the study, or what their participation would entail (Thabe, 2015). As such, sound relationships could be maintained between the participants and the research team members (Stevens, 2013). Sound relationships and open communication seemingly secured their continued participation, with the research team remaining transparent and open as researchers, throughout the study.

4.5 MY ROLE AS RESEARCHER

As the current study forms part of a broader ongoing project funded by the European Union and Department of Higher Education and Training (EU/DHET), a number of researchers, of which I was one, were involved in the course of the project. I thus co-facilitated the PRA-based workshops that were conducted with teachers and stakeholders, both for data generation and member-checking purposes (Stake, 2000). I also conducted interviews, made observations and compiled field notes as well as visual and audio-visual data. Even though my training as educational psychologist equipped me with interviewing and facilitation skills, I reminded myself that I had to approach these tasks as researcher and not as psychologist for the duration of my involvement in field work.

PRA-based workshops involved teachers and stakeholders that were characterised by differences in experiences, cultures, values and ideologies. They differed from one another as well as from me, requiring of me to apply reflexivity as researcher throughout the study. As I relied on participatory methodology principles, as co-researcher I constructed meaning together with the participants, remaining aware of my own reservations and guarding against any bias that could negatively impact the study. Even so, I embraced the participants' co-construction of knowledge as per my chosen epistemology, being interpretivism (Carcary, 2009; Mack, 2010).

Throughout the study, I guarded against the above-mentioned differences harming the participants or the study itself. This could be limited as participants also acknowledged these differences, respected and embraced them. Regardless of my being an academic staff member at the University of Pretoria at the time of the field visits, which

participants could potentially also view as a power-related differentiating factor, I was bound by ethical guidelines to listen to participants' voices and ensure that they would be heard by reporting on the study in a proper rigorous manner (Mertens, 2009). To this end, I continually emphasised the role of the participants as that of expert informants, highlighting the idea that they had the power to determine the progress and outcome of discussions.

4.6 RIGOUR OF THE STUDY

In my attempt to ensure a rigorous study, I followed the criteria relevant to participatory research. In this section, I discuss the strategies I employed in support of the respective quality criteria.

4.6.1 Credibility

Credibility refers to the extent to which a study is plausible and appropriate, as agreed specifically between participants and the researchers (Lincoln, Lynham & Guba, 2011). I regard the current study as credible due to my detailed explanation and supportive evidence on the research process and construction of findings included in this thesis (Zhang & Wildemuth, 2009). The findings of my study can thus be viewed as truthful and trustworthy (Seale, 2000). According to the guidelines provided by Creswell (2009) and Patton (2002), in attempting to ensure credibility, I checked participants' views in terms of coherence and that these also supported my observations and interpretations, as well as the conclusions I came to. For this purpose, I include excerpts from the raw data in my discussion in Chapter 5. As an interpretivist, I was actively involved in attempting to understand and explain the needs and experiences of the participating teachers in both full service and special needs schools. Furthermore, I aimed to present these perceptions in a credible manner in this thesis.

I conducted member-checking to strengthen the credibility of my study, which assisted me in validating the representation of the generated and analysed data in correlation with the views of the participating teachers and stakeholders (Seale, 2000; Tobin & Begley, 2004). Moreover, the experience I had gained in previous research projects as I observed research processes as field worker and later participated as researcher assisted me in my attempt to produce credible findings.

To further ensure credibility, as my research design denotes, I chose not to rely on a single data generation method but to include multiple methods (Maree, 2007; Patton, 2002). I did not work alone as researcher but with co-researchers in an attempt to enhance the credibility of this study (Maree, 2007). I was thus exposed to various perspectives and angles of approaching data generation and analysis, and subsequently answering the formulated research questions (Patton, 2002). According to Maree (2007), this can be related to crystallisation, which was possible due to the multiple data generation methods I included and my collaboration with co-researchers, in support of obtaining a comprehensive understanding of the phenomenon I set out to explore.

4.6.2 Dependability

Dependability refers to research findings' consistency, thereby to the ability to produce similar findings should a study be repeated in a similar setting (Seale, 2000). To ensure dependability, I attended to reporting accurately the results and findings of this study and describe the research process in detail (Merriam, 2002; Terre Blanche & Durrheim, 2002). Depending on the similarities of contexts, it can be predicted that the findings I obtained may perhaps be similar if the study is to be repeated elsewhere (Babbie & Mouton, 2001). It is, however, also worth noting that an interpretivist study may imply that research in an ever changing world may lead to results that are different even if the same study is conducted again (Lincoln & Guba, 2003; Terre Blanche & Durrheim, 2002).

I applied rigorous research practices and included a detailed report in this thesis in striving after dependability (Patton, 2002; Seale, 2000). In my discussion of the results in Chapter 5, I include direct quotations and examples from the data in support of my discussion (Shenton, 2004). Reflexivity, regular discussions and debriefing sessions with my supervisor about decisions for data generation and documentation, and discussions during data analysis with co-researchers, also played an important role in ensuring dependability (Patton, 2002; Tobin & Begley, 2004).

4.6.3 Confirmability

Confirmability refers to the extent to which research results are the responses of participants rather than representing the researcher's interests, biases and/or

motivations (Patton, 2002). Given the precautions applied in conducting this study, readers may to a certain extent confirm the research results, which are based on the participants' ideas and perceptions (Zhang & Wildemuth, 2009). In support of confirmability, I thus aimed to ensure that the research data, interpretations and findings were not the result of my biases, subjectivity and creations but a true reflection of the participants' views on the topic I investigated (Mouton, 2001; Seale, 2000). I attempted to remain as objective as possible throughout the study, by engaging in continuous reflection and discussions with my supervisor and co-researchers (Terre Blanche & Durrheim, 2002).

Given the above, I made it my goal to safeguard the findings from being features of my biases and imagination, but rather to be true and based in reliable origins of the data I generated and analysed in the course of the study (Lincoln & Guba, 2003; Tobin & Begley, 2004). However, it is worth mentioning that an interpretivist researcher may find it difficult to remain purely objective as he or she will typically form part of the research and data generation processes (Shenton, 2004). Crystallisation and reflexivity assisted me to limit the possible effect of bias and subjectivity (Flick, 2011; Maree, 2007).

4.6.4 Transferability

Transferability refers to the extent to which rich descriptions are provided as evidence of participants' responses and the possibility of findings being applied to other contexts (Lincoln & Guba, 2003). I consider the current study to be unique with the possibility of the research findings being applied to related contexts (Connolly, 2003). The manner in which the study was conducted and data was generated allows for representation to the wider population even though generalisability is not possible, based on the selected epistemology, methodological approach and research design (McMahon & Patton, 2000). As such, in this case transferability indicates how the same process may be followed in different contexts and lead to similar outcomes, or how the findings can be transferred to similar contexts (Huberman & Miles, 2002; Seale, 1999).

In support of transferability, I include detailed descriptions of the research process and the experiences and ideas of the teacher participants as well as the stakeholders that participated in this thesis. As mentioned previously, as it was not my goal to generalise

(Terre Blanche & Durrheim, 2002); the discretion lies with the reader as to how transferable the findings are to similar contexts, based on the detailed descriptions that I include (Lincoln & Guba, 2003; McMillan & Schumacher, 2010). In support of such a decision, I also provide a trail of evidence (Consult Appendix G-J) in this thesis, demonstrating how I analysed and interpreted the data for the reader to review the process (Nieuwenhuis, 2007).

4.6.5 Authenticity

The findings I obtained represent different meanings attached to participants' realities and capture various perspectives that were shared during data generation sessions (Seale et al., 2011; Tobin & Begley, 2004). To this end, no point of view was regarded as wrong or unacceptable, with all contributions adding to my understanding of the research focus area. I relied on educative authenticity that refers to the research participants' development of an understanding of one another's viewpoints and appreciation of the various contributions (Lincoln et al., 2011). As such, I allowed participants to express their viewpoints freely in a space that encouraged them to do so (Seale et al., 2011). During their participation, teachers and stakeholders were empowered to take action and implement the lessons they had learnt from one another during the research process in terms of teaching and supporting learners with visual impairment (Lincoln & Guba, 2003; Seale et al., 2011).

As the participants experienced specific challenges in the field of visual impairment in terms of the demand to implement inclusive education policy, their contributions supported authenticity and an authentic understanding of their needs and expectations (Jones, 2013). Even though I guarded against transferring my existing knowledge on inclusive education policy and/or visual impairment to the participants, I provided support and encouragement during discussions, more specifically in terms of the ideas raised by the participants. In further enhancing authenticity, I included member-checking to confirm that my initial understanding of the participants' viewpoints was accurate (Lincoln & Guba, 2003). To have an even better understanding of the participants' realities and meanings attached to their realities, I often engaged in informal discussions with them, exploring their understanding of a topic and ideas not clear to me (Flick, 2011; Tobin & Begley, 2004).

4.7 CONCLUSION

The purpose of this chapter was to explain the research process I followed for my study. To this end, I discussed the paradigms I selected in terms of the epistemological and methodological choices I made. I then explained the research design, selection of participants, as well as the selected strategies for data generation, documentation and analysis. I stated the ethical considerations I respected in the course of the study, and concluded the chapter with a discussion of the quality criteria I endeavoured to adhere to.

In the following chapter, I present the results of the study. I discuss the results I obtained in terms of the four themes and related sub-themes I identified during thematic data analysis. I present the findings of the study in Chapter 6, where I relate my results to existing literature.

CHAPTER 5

RESULTS OF THE STUDY

5.1 INTRODUCTION

In the previous chapter I explained the research process. I discussed the paradigmatic choices I made, namely interpretivism and PRA. I described the instrumental case study design I relied on, how I selected the cases and participants, and which strategies I used for data generation, documentation and analysis. I concluded the chapter with a discussion of ethical considerations, my role as researcher and the quality criteria I aimed to adhere to.

In this chapter I report on the results of the study. I present the results in terms of the four themes I identified following inductive thematic analysis, as well as the related sub-themes. Throughout, I include excerpts from the data to enrich my discussion.

5.2 RESULTS OF THE STUDY

As background to my discussion of the themes and sub-themes I identified, I include an overview of the five phases of the broader project in Table 5.1, indicating my involvement in the different phases.

Table 5.1: Phases of the project

Phase 1
<i>Pre-programme development and preparation activities (November 2016 -- September 2017):</i> This phase focused on a background literature study, broad conceptualisation of an Advanced Diploma in Visual Impairment Studies and preparation of proposals for approval of the qualification at the various levels, as well as obtaining ethical clearance for the project from the institution, and permission to conduct research in the selected schools from the various Departments of Education. I obtained ethical clearance and permission for my study (as part of the broader project) during this phase.

Phase 2
<p><i>Data generation with teachers and stakeholders (October 2017 - April 2018):</i> During this phase ten special needs schools and seven full service schools in five provinces of South Africa were visited for data generation. In addition, 43 expert stakeholders formed part of the data generation phase, sharing their expertise during a stakeholder colloquium. I was involved in 14 research visits to schools as well as in the colloquium that was facilitated in Pretoria, Gauteng.</p>
Phase 3
<p><i>Data analysis and draft outline of the Advanced Diploma in Visual Impairment Studies (April - May 2018):</i> Data generated during the previous phase was analysed by the four core research team members and a draft outline of the proposed modules for the postgraduate qualification was developed. As such, I was involved in joint analysis of the data and discussions on the conceptualisation and outlines of the various modules.</p>
Phase 4
<p><i>Member-checking colloquiums with participants (June - September 2018):</i> During this phase all the participants were invited to attend a colloquium (one per province and one stakeholder colloquium in Pretoria, Gauteng) where the module outline and preliminary content of the modules were presented for further input by the participants. I co-facilitated three of the six colloquiums.</p>
Phase 5
<p><i>Final analysis and development of modules and supportive material (September 2018 to the present):</i> During this phase, the data generated during member-checking colloquiums was analysed and incorporated into the initially proposed structure of the qualification. Hereafter, module and open education resource material development commenced and is currently in the final phases. During this phase I participated in data analysis and open education resource material development.</p>

Following the initial and follow-up inductive analysis of the data, four themes were identified, each with related sub-themes, as captured in Figure 5.1. The themes relate to the experiences and perceptions of the participants of inclusive education policy

implementation and visual impairment in the classroom as well as their views on their participation in the PRA-research process while generating data for the development of a postgraduate qualification in visual impairment studies.

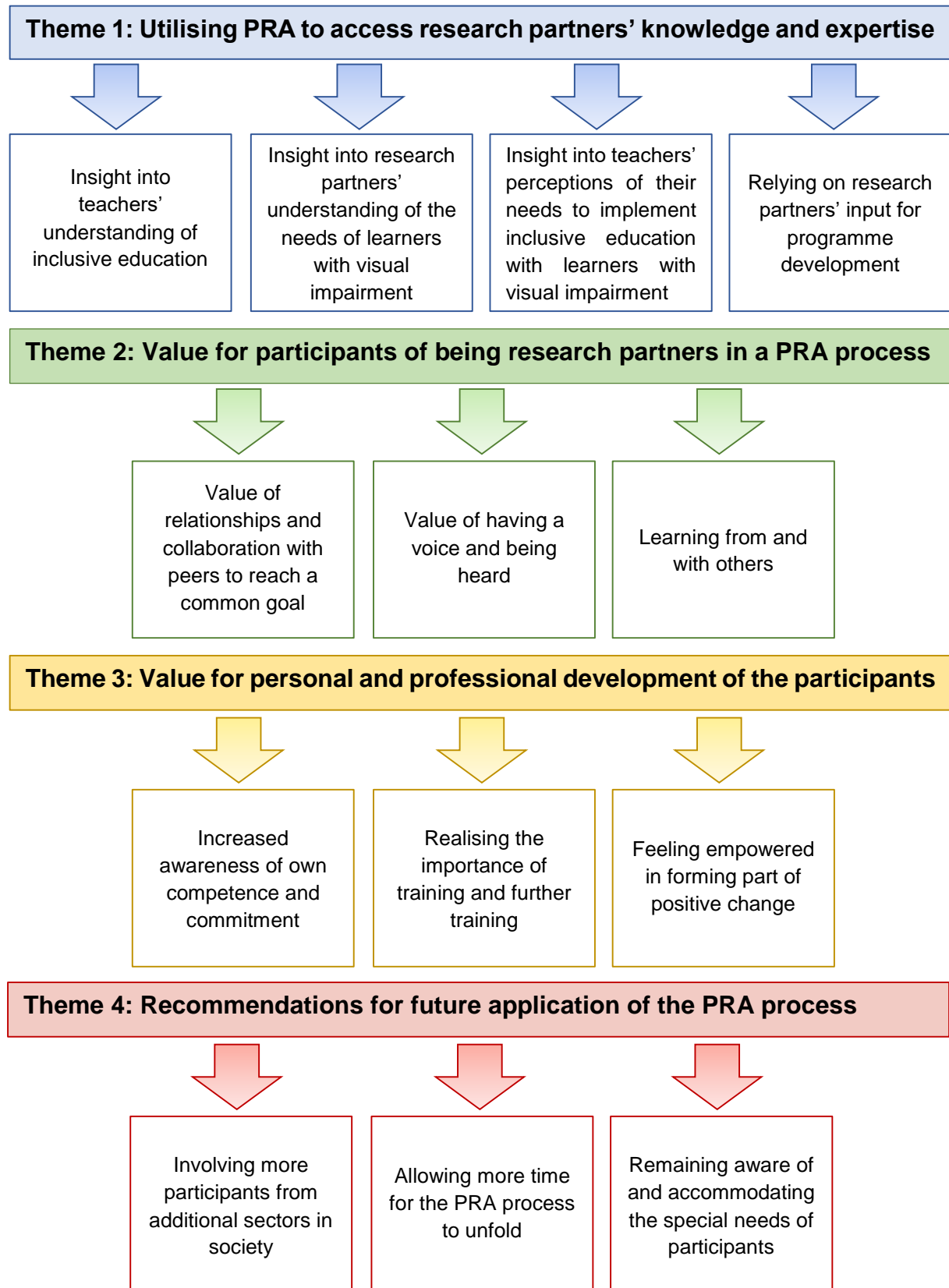


Figure 5.1: Themes and sub-themes of the study

5.2.1 Theme 1: Utilising PRA to access research partners' knowledge and expertise

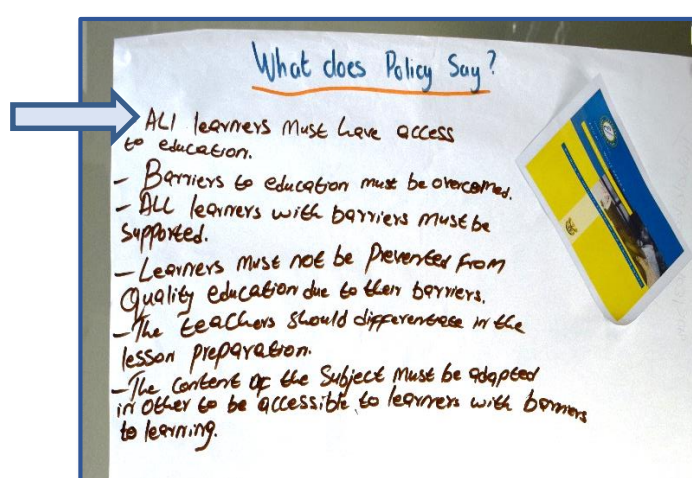
The first theme attests to the possibility of utilising PRA when aiming to gain insight into participants' knowledge and expertise. This theme entails four sub-themes, relating to insight into teachers' understanding of inclusive education; insight into research partners' understanding of the needs of learners with visual impairment; insight into teachers' perceptions of their own needs and expertise to implement inclusive education policy, and relying on research partners' input for programme development. In Table 5.2 I summarise the inclusion and exclusion criteria I was guided by for Theme 1.

Table 5.2: Inclusion and exclusion criteria for Theme 1

Theme 1: Utilising PRA to access research partners' knowledge and expertise		
	Inclusion criteria	Exclusion criteria
Sub-theme 1.1: Insight into teachers' understanding of inclusive education.	All data related to teachers' knowledge and insight into inclusive education policy and what this implies in the South African school context.	Data that referred to participants' knowledge and understanding of visual impairment, their own needs to implement inclusive education policy, or ideas for the proposed postgraduate qualification.
Sub-theme 1.2: Insight into research partners' understanding of the needs of learners with visual impairment.	Data related to teachers' and expert stakeholders' understanding of learners with visual impairment as well as such learners' needs and expectations.	Data related to teachers' understanding of inclusive education policy, their needs for implementing the policy with learners with visual impairment, or their ideas for a postgraduate qualification in this field.
Sub-theme 1.3: Insight into teachers' perceptions of their needs to implement inclusive education with learners with visual impairment.	Data related to teachers' awareness of their own needs and the expertise required of teachers when implementing inclusive education policy, more specifically when working with learners with visual impairment.	Data that referred to teachers' understanding of inclusive education policy, the needs of learners with visual impairment, or ideas for the proposed postgraduate qualification.
Sub-theme 1.4: Relying on research partners' input for programme development.	Data related to teachers' and stakeholders' ideas for possible content for the envisioned Advanced Diploma in Visual Impairment Studies.	Data related to participants' understanding of inclusive education and the needs of learners with visual impairment, or teachers' needs when implementing the policy with such learners.

5.2.1.1 Sub-theme 1.1: Insight into teachers' understanding of inclusive education

This sub-theme captures the teacher participants' understanding of inclusive education policy and what the policy implies for teachers and their teaching practice. According to the participants, inclusive education entails the provision of equal access for all to quality education, thereby allowing all learners to have access to opportunities and resources. This rather concise view is captured in Photograph 5.1 and is reflected in the following contribution by a teacher: *Inclusive education should include all learners with learning barriers* (PRA-T⁷, S1, 24 October 2017).



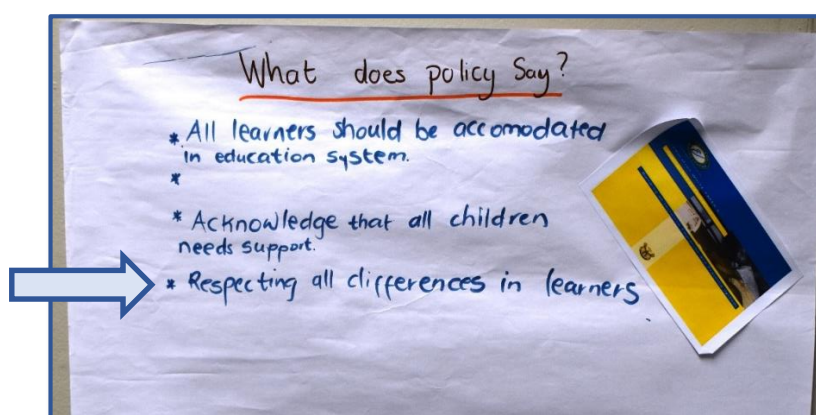
Photograph 5.1: Teachers' understanding of inclusive education policy (S4, 7 February 2018)

In support I noted that teachers displayed some insight into inclusive education and what it entails, yet that their view seemed rather narrow, lacking a comprehensive understanding of the concept or what inclusive education policy implies for teachers in every day classrooms. I captured this idea in the following way in my field notes: *Answers were checked from Google by most educators* (FN, 25 October 2018), and

⁷ Henceforth the following abbreviations apply: PRA-T = PRA data generation with teachers; PRA-S = PRA data generation with stakeholders during the colloquium of 25 April 2018; MC-T = member-checking with teachers during the various colloquiums; MC-S = member-checking with stakeholders during the colloquium of 26 September 2018; I = Individual interview; FN = Field notes; RJ = Reflective journal; S = School.

Some were making notes on their own on the side first before joining in with the rest of the group (FN, 24 October 2018).

The teacher participants seemed aware of the fact that inclusive education policy propagates non-discrimination and respect for learners with special needs – for example visual impairment – as well as curriculum adaptation to allow for equal access to educational opportunities and resources for all learners. In this regard, they for example stated, *we should not discriminate against learners because of their colour, language or disability* (PRA-T, S15, 12 April 2018) and ... *accommodates all learners with different disabilities* (PRA-T, S3, 29 January 2018). In terms of respect for all learners, Photograph 5.2 captures the participants' view that policy requires this of all teachers.



Photograph 5.2: Teachers' understanding of respect as component of inclusive education policy (S4, 15 May 2018)

The importance of external support for the implementation of inclusive education policy was highlighted, implying the need for more in-depth understanding of the policy and continued training for implementation. Teachers referred to *no proper training ...* (PRA-T, S2, 25 October 2017) and I similarly noted, *No IE training has been brought to the school* (FN, 13 February 2018). Teachers' limited understanding of inclusive education policy could furthermore be observed at some of the schools when teacher participants started paging through the hard copy White Paper 6 (Department of Basic Education, 2001) when prompted to share their understanding of the current policy. Photograph 5.3 captures this observation that led me to believe that teachers may perhaps benefit from additional training on inclusive education before implementing the policy with confidence. Teacher participants confirmed this view when I observed

them to be struggling to respond to some of the questions, as captured in my field notes in the following way: ... *never received training on IE and they are battling to respond to some questions* (FN, 6 March 2018).



Photograph 5.3: Participants consulting White Paper 6 when discussing their understanding of inclusive education policy (S5, 14 February 2018)

In addition to their seemingly limited understanding of inclusive education policy, as captured in another one of my reflections (*Some groups really struggle to come with responses especially on the inclusive education topic* [RJ, 7 March 2018]), several teachers directly expressed the view that they found it difficult to implement inclusive education policy in class and that they did not necessarily regard it as suitable for special needs schools. For example, during an interview with a special needs school teacher, she mentioned, ... *it's possible but it's not easy especially with learners with visual impairment* (I5, 7 February 2018, p. 17). In support, a teacher from another school indicated that it ... *is easier to have the policy written in black and white but then in practice it becomes difficult for an educator to actually implement what was taught* (I8, 20 February 2018, page 31). In confirmation, I reflected on these ideas in the following way: ... *it is sometimes difficult to plan a lesson because it depends on the mood on the day* (FN, 6 March 2018).

In summary, the teachers who participated in this study displayed some understanding of the underlying principles of inclusive education policy but seemingly lacked a comprehensive view of what the policy entails or implies for practising teachers. They furthermore voiced some reservations in terms of the suitability of this policy for all

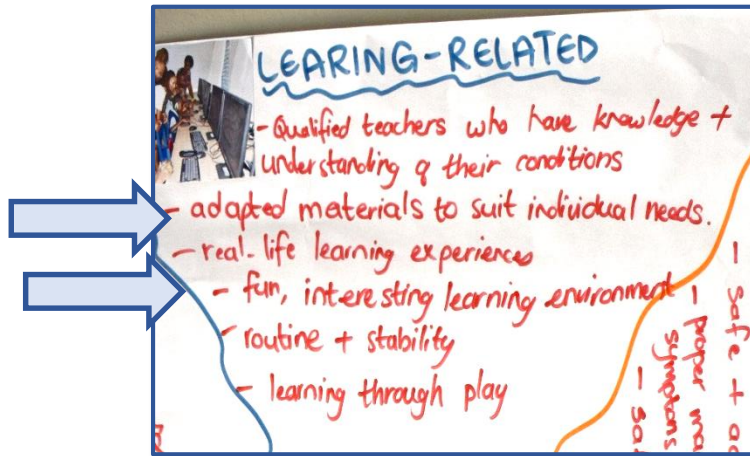
schools and indicated the need for additional guidance to fully understand what the policy entails and how to implement it.

5.2.1.2 Sub-theme 1.2: Insight into research partners' understanding of the needs of learners with visual impairment

This sub-theme captures the participating teachers' and expert stakeholders' understanding of the needs of learners with visual impairment in the school context. Their perceptions were accessed through PRA-based discussions and the matrices they compiled in discussion with one another. In summary, participants referred to the importance of accommodating all learners, including those with visual impairment, having Learning and Teaching Support Material (LTSM) available and using it correctly, and providing a conducive learning environment for all learners.

According to the participants, learners with visual impairment need to be accommodated by attending to the various important aspects of learning and child development. In this regard a Grade 4 blind teacher shared his thoughts on factors that may negatively affect the learning and development of learners with visual impairment, stating, *Curriculum good but not adapted; question papers and text books not adapted; no accommodation for VI learners* (FN, 15 March 2018)⁸. In support of this view, the need for adapted material that may serve individual learners' needs is captured in Photograph 5.4, indicating that this can support learners with visual impairment. In addition, the teacher participants who completed this poster emphasised the importance of an adapted learning environment and teaching strategies for optimal learning to take place.

⁸ Responses are supplied verbatim and have not been edited.

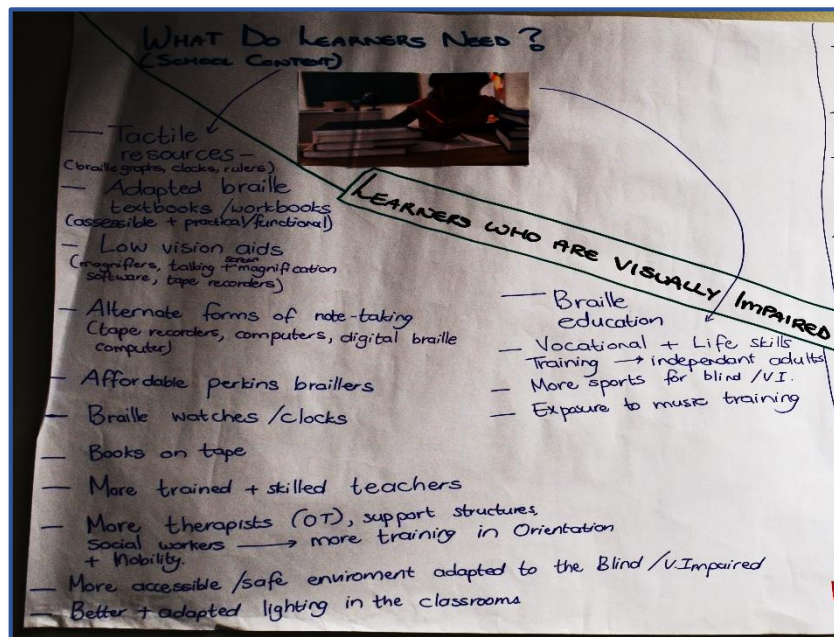


Photograph 5.4: Need for adapted learning material
(PRA-S, 25 April 2018)

In addition to scholastic needs, teachers mentioned that limited involvement in extra-mural activities may hinder the learning and development of learners with visual impairment. Such limited involvement or the perception of such limitations can be linked to teachers not being familiar with the possibilities of these activities, particularly for learners with visual impairment. More specifically, the teacher participants may have highlighted this limitation due to their need to be better equipped in this field, referring to *skills to teach extra mural activities, e.g. blind cricket* (PRA-T, S4, 2 February 2018). In confirmation, teachers at another school suggested that the envisioned qualification include information and content on *extra-curricular activities* (PRA-T, S3, 29 January 2018) for learners with visual impairment.

Participants agreed that the learning environment is a priority when wanting to accommodate learners with visual impairment. For example, they stated that the *classroom environment should favour the different disabilities for effective teaching and learning* (PRA-T, S15, 12 April 2018). According to the participants, learners with impairment/disability require schools that can enhance their learning and development. I confirmed this view in the following way in my field notes: *School environment seems conducive, school seems to be well organised (big and clean)* (FN, 17 April 2018). To this end, participants specifically referred to classroom settings, play grounds, public spaces (bathrooms) and transport facilities, which have to be responsive to the needs of learners with visual impairment. In this regard they stated that *infrastructure must be conducive for effective teaching and learning* (PRA-T, S15, 12 April 2018).

In the classroom context specifically, participants emphasised the importance of supporting learners with visual impairment to be able to access the curriculum adequately to accommodate their special needs. One of the strategies they referred to when aiming to achieve this goal relates to teachers being knowledgeable on how to provide individual support to learners, as captured in the following contribution: ... *the teacher should know how to develop a teacher checklist in order to formulate IPs which is individual education plans for each learner* (MC-S, 27 September 2018). Other strategies that participants mentioned entailed the placement of learners in class, for example placing a partially sighted learner in the front of the class or in a position where the learner is able to see what is written on the board; or providing partially sighted learners with large font printed material, magnifying glasses and/or spectacles, as summarised in Photograph 5.5.

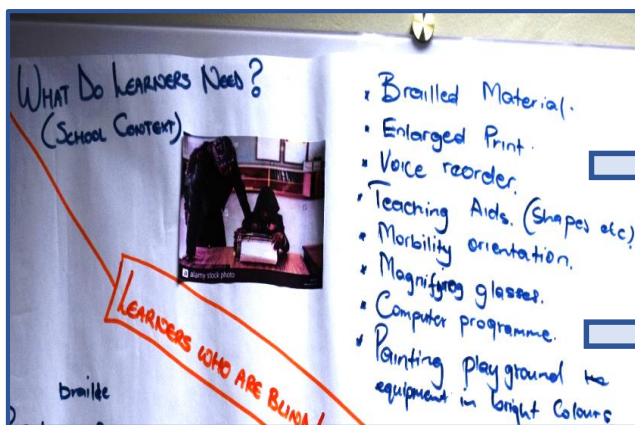


Photograph 5.5: Some needs of learners with visual impairment (S3, 29 January 2018)

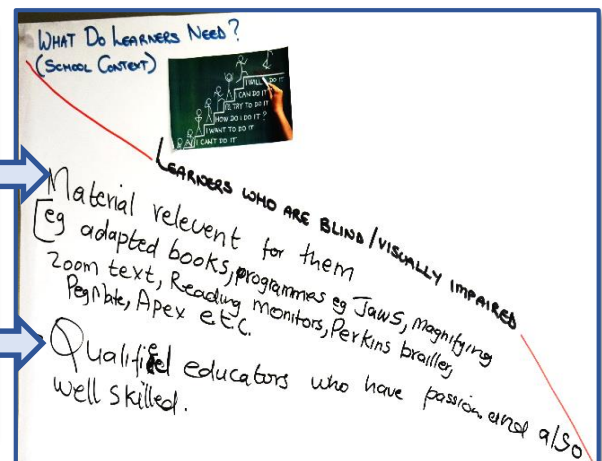
Moving outside the classroom, a school-based occupational therapist at one of the special needs schools whom I interviewed, emphasised that, as part of accommodating learners with visual impairment, the learners need to be orientated on the school grounds. She stated, *They need someone who can orientate them on daily basis so that they know where they are going* (I7, 8 February 2018, p. 46). According to the participants, when learners with visual impairment are enrolled at a school or move up a grade/level, they similarly need to be orientated in terms of the new

environment they find themselves in. In this regard, some teachers elaborated by referring to the need for a so-called friendly environment, mentioning that, for example, *walkways must be flat* (PRA-T, S2, 25 October 2018).

In addition to the needs identified in and outside the classroom, participants referred to the need for specialised resources on different levels, mentioning the need for adapted material and specialised equipment as well as human resources. In terms of material and physical resources, participants emphasised the need for relevant Learning and Teaching Support Material (LTSM) when teaching learners with visual impairment, stating that there is typically *no LTSM in the classroom* (PRA-T, S9, 6 March 2018). Participants seemingly believed that for these learners to benefit optimally from the learning experience, LTSM is required, specifying, *LTSM appropriate to the visually impaired* (PRA-T, S14, 15 March 2018). According to the participants, even though LTSM is not yet widely available in South African schools, learners need to engage with such material to be able to learn. One of the participants summarised this view in the following way: *The learners must have good learning and teaching materials to support their needs* (PRA-T, S7, 13 February 2018). In support, Photographs 5.6 and 5.7 depict a list of specific material resources and specialised equipment that participants regarded as important for learners with visual impairment.

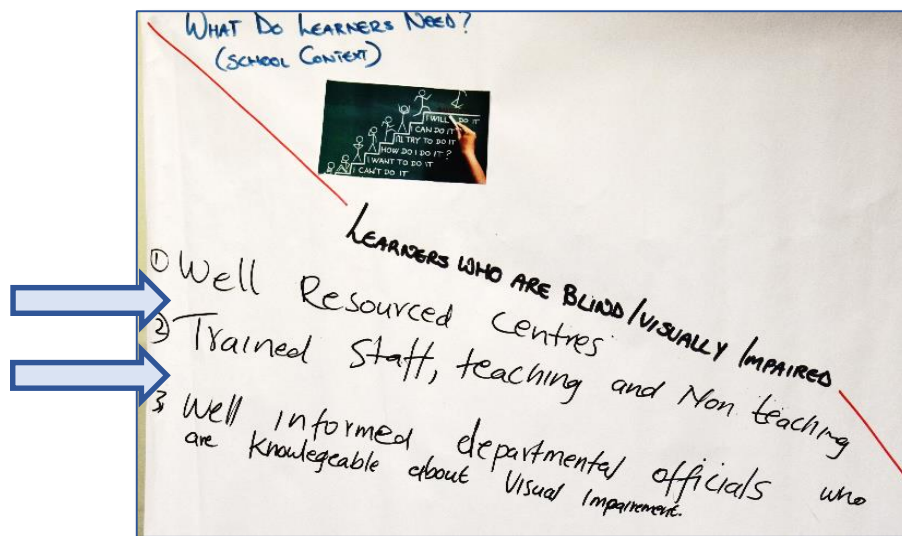


Photograph 5.6: Additional needs of learners with visual impairment (S12, 13 March 2018)



Photograph 5.7: Need for specialised material and human resources of learners (S10, 6 March 2018)

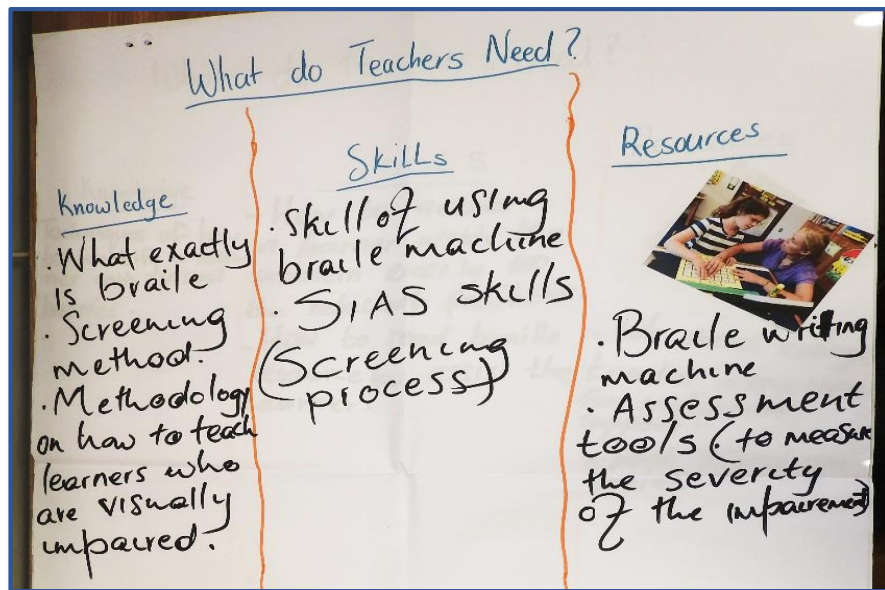
In terms of the need for human resources, participants shared the view that learners with visual impairment require qualified teachers and school staff members, therapists as well as the support of skilled district officials, as indicated in both Photographs 5.7 and 5.8. When discussing these PRA-matrices, a participant explained that learners are in need of *trained staff, teaching and non-teaching* (PRA-T, S13, 13 March 2018). This view was confirmed by a Learning Support Advisor during an individual interview, stating, *We don't have the support staff* (I3, 22 February 2018, p. 4).



Photograph 5.8: Need for competent and specialised human resources (S13, 13 March 2018)

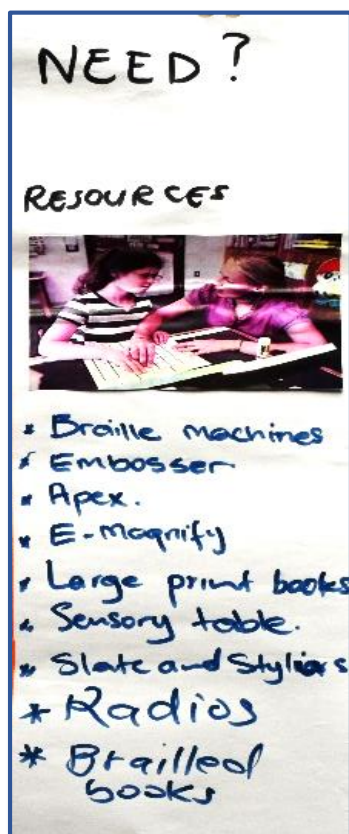
5.2.1.3 Sub-theme 1.3: Insight into teachers' perceptions of their need to implement inclusive education with learners with visual impairment

Participating teachers were able to identify various needs and challenges they had been experiencing in teaching and supporting learners with special needs, with specific reference to learners with visual impairment. They were able to identify areas of knowledge, skills and resources that they viewed as important to implement in inclusive education with learners with visual impairment, as captured in Photograph 5.9.



Photograph 5.9: Teachers' needs when working with learners with visual impairment
(S1, 24 October 2017)

In explaining their views to the broader group, teachers emphasised the importance of understanding visual impairment and related conditions when having to implement inclusive education with such learners. This view was confirmed during the stakeholder colloquium, when participants stated, *It's very important for the teacher to understand visual impairment, visual condition and also multiple disabilities* (PRA-S, 25 April 2018). As indicated in Photograph 5.9, teachers also indicated the need for knowledge and the related skills and resources on aspects such as Braille, screening procedures and suitable teaching strategies when working with learners with visual impairment. In confirmation, Photographs 5.10 and 5.11 provide examples of the required resources identified by the participants.



Photograph 5.10: Resources teachers require to engage with learners with visual impairment (S8, 14 February 2018)



Photograph 5.11: Additional resources teachers require (S15, 12 April 2018)

As such, it became evident that teachers seemingly realised that they required more specialised knowledge due to their not having received any focused training in this field. They reportedly lacked the necessary specialised skills to manage a classroom with learners affected by visual impairment or, for example, multiple disabilities. Teachers in this regard indicated that *educators should be trained to deal with learners that have multiple disabilities* (PRA-T, S4, 2 February 2018). Participants specifically referred to teachers not being skilled in managing classroom discipline where learners with disabilities are included as their attempts to discipline learners may be interpreted as discriminating against certain learners, in their opinion. This indicated need is captured in contributions referring to *discipline strategies* (PRA-T, S7, 14 February 2018), and *discipline skills* (PRA-T, S2, 25 October 2017) that were identified as specific needs.

In addition to the need for guidance on disciplining learners with visual impairment, teachers indicated the need for teaching strategies that are suitable for learners with

visual impairment, indicating that they had to be *trained to apply various strategies and techniques as far as education of visual impaired learners* (PRA-T, S17, 17 April 2018). During observation in a Mathematics class, my observations confirmed this need for teaching skills. I namely observed how the teacher found it challenging to explain fractions to blind learners, capturing my observation in the following way: *She is explaining looking from the textbook* (FN, 5 March 2018), despite the fact that not everyone could see the textbook.

Closely related, teachers reported that they often struggled to explain lessons related to tourism, geographical maps and other mathematics concepts. To this end, a teacher, for example, said, *Specifically in my subject, tourism some of the challenges that I have especially to do with the material we need, tangible things such as your map it becomes a challenge, you can see the map that I'm having here on the wall is difficult for the blind learner, I'm speaking of Brazil they won't know where Brazil is so it really is a challenge* (I5, 07 February 2018, p. 30). In support, participating teachers mentioned the difficulty they experienced to elaborate on things such as colour when teaching learners that are blind.

The fact that many teachers had not been trained in Braille apparently posed a distinct challenge when expected to teach learners who are blind. In addition to and closely related to the need to acquire skills on suitable teaching strategies and gain Braille competence, participants indicated the need to be knowledgeable in how to use specialised resources in class when teaching learners with visual impairment, such as apex and talking calculators, to mention but a few. In terms of their need to acquire skills on how to operate specialised resources and assistive devices, they stated that they need *to be trained on how to use technological assistive products* (PRA-T, S17, 17 April 2018) and that they *require training on how to use assistive devices* (PRA-T, S6, 7 February 2018).

Teachers furthermore indicated the need for training or guidance on how to facilitate referral pathways for learners with special needs, stating, *Educators must know where and how to refer a learner* (PRA-T, S1, 24 October 2018). Closely related, they reportedly required guidance on how to identify a learner with visual impairment in class before referring such a learner to a relevant specialist for additional support. A teacher explained this need as follows: *DOE should capacitate us with SIAS Policy in*

order to be able to screen, identify, assess and support learners (PRA-T, S11, 7 March 2018). In establishing referral pathways, teachers specifically underscored the need to know which specialist to contact in which case, and what such a referral procedure would entail.

Despite the majority of the teacher participants indicating the needs described in the previous paragraphs, a few individual teachers seemingly possessed some knowledge and experience in the field. A few teachers explained that they possessed knowledge on *Braille Grade 1 and 2 and how to adapt papers* (PRA-T, S6, 7 February 2018), that they *know Braille and mobility* (PRA-T, S14, 15 March 2018) and had experience on *how to use different strategies and methods* (PRA-T, S3, 29 January 2018). In confirmation, I observed some teachers to be accommodating learners with visual impairment by implementing alternative teaching strategies. I noted this observation in my field notes in the following way: ... *grass, sticks and a brick brought to class to engage with learners and giving them practical examples* (FN, 12 April 2018). Moreover, at another school, I observed *increased confidence in inclusive education* (RJ, 29 January 2018).

Furthermore, we observed some teachers to be creative and thinking out of the box when working with learners with visual impairment. Some teachers, for example, created LSTM from recycled material to better engage with learners with visual impairment, an idea I captured in the following way: *Educators came up with materials and resources that are helpful for learners – tactile material (watch, calendar, counters in braille)* (FN, 5 February 2018). These observations are supported by Photographs 5.12 to 5.14, with Photographs 5.12 and 5.13 demonstrating different types of counter suitable for learners with visual impairment, whereas Photograph 5.14 captures watches/clocks created in yellow for them to be more visible for learners who have partial vision.



Photograph 5.12: Counters made by teachers for young learners with visual impairment (S5, 5 February 2018)



Photograph 5.13: Counters made by teachers for older learners with visual impairment (S5, 5 February 2018)



Photograph 5.14: Watches/clocks for learners with visual impairment (S5, 5 February 2018)

Despite the majority of the participants indicating the need for additional resources at school to support them in implementing inclusive education policy, some teachers apparently realised that they could also use what they already possessed to teach and support learners with visual impairment. One of the teachers summarised this idea by saying, *Use skills that we have at our disposal to support all differently abled learners in all aspects of teaching and learning* (PRA-T, S8, 6 March 2018). Some teachers apparently realised the value of their experience and skills, stating that they possessed the *ability to differentiate the learning barriers* (PRA-T, S2, 25 October 2018), which was perceived by them as a positive quality in the inclusive education arena. Teachers

furthermore appeared to realise the value of and possibility to *form intersectoral collaboration with other stakeholders* (PRA-T, S17, 17 April 2018) to learn from peers and better support learners with visual impairment through the example of and guidance by others. Finally, some teachers seemingly realised that they were already to an extent accommodating learners with visual impairment by, for example, *sitting arrangement be considered, e.g. sitting of learner with poor eyesight in front* (PRA-T, S15, 12 April 2018).

5.2.1.4 Sub-theme 1.4: Relying on research partners' input for programme development

Participants actively engaged in a collaborative effort to discuss the development of the proposed postgraduate qualification in visual impairment, more specifically in terms of potential module content. In realising that they, as teachers, might not have been sufficiently trained, informed and equipped to work with learners with visual impairment, teacher participants seemed positive and eager to brainstorm possible content for such a qualification that could assist current and prospective teachers to work with learners with visual impairment in future. To this end I noted the following: *Teachers and principal willing to participate, very cooperative* (FN, 17 April 2018). In support, I noted similar observations at one of the special needs schools by stating that *the principal and educators support the idea of developing a postgraduate qualification* (RJ, 1 February 2018). Teachers seemingly realised the importance of the programme, proclaiming that they required to be *trained to apply various strategies and techniques as far as education of visual impaired learners* (PRA-T, S17, 17 April 2018).

Based on our observations, it thus seemed clear that both the participating teachers and expert stakeholders were willing to share their ideas and expertise in the development of the qualification. After conducting an individual interview, I recorded the following as part of my field notes: ... *very warm teacher who is willing to share her experience* (FN, 15 March 2018), referring to another teacher as *opened up* (FN, 14 March 2018) when sharing her experience and ideas in the field. Both the participating teachers and the expert stakeholders shared their ideas on possible topics to be included in the proposed programme and modules, expected outcomes of the qualification and which resources could be utilised to train future students.

Participants generously engaged in *sharing ideas about teaching and learning VI learners* (MC-T, 9 June 2018) and were willing to ... *share ideas about challenges that they meet and come up with suggestions to improve and correct some of the challenges and problems based on their experiences* (MC-S, 27 September 2018). Examples of the active participation of teachers during PRA-based discussions are captured in Photographs 5.15 and 5.16.



Photograph 5.15: Participants sharing ideas with researchers on suitable content for the proposed qualification (S5, 5 February 2018)

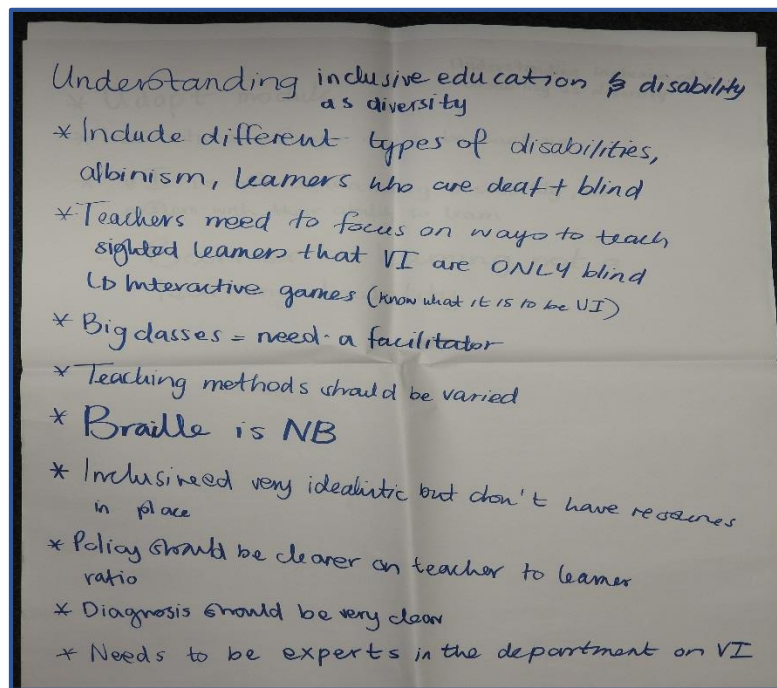


Photograph 5.16: Participants discussing ideas in small groups (S6, 7 February 2018)

During the PRA-based discussions, participants were allowed to converse in a language of their choice, probably adding to the richness of the discussions that occurred. Discussions furthermore seemingly encouraged participants to add and/or counter one another in the small and larger groups, resulting in rich data on possible topics to include in the postgraduate programme modules.

Based on the PRA discussions and activities related to possible module content, the research team was able to compile draft outlines for the various modules of the programme that has been developed after analysing the data generated by both the teacher and expert stakeholder-participants. Following further desktop research and member-checking colloquiums, the module content could be refined and finalised.

Photograph 5.17 captures some ideas that were generated by the expert stakeholders on a module related to understanding inclusive education and disability as diversity.



Photograph 5.17: Ideas by expert stakeholders on one of the modules of the postgraduate qualification (MC-S, 25 April 2018)

5.2.2 Theme 2: Value for participants of being research partners in the PRA process

The second theme concerns the perceived significance of being involved as research partners in the PRA process, as experienced by the participants. Three sub-themes apply, as captured in Table 5.3, indicating the criteria relied on in identifying these.

Table 5.3: Inclusion and exclusion criteria for Theme 2

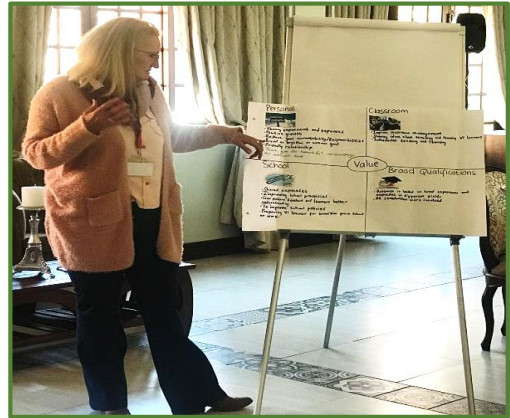
Theme 2: Value for participants of being research partners in a PRA process		
	Inclusion criteria	Exclusion criteria
Sub-theme 2.1: Value of relationships and collaboration with peers to reach a common goal.	All data related to participants working together with peers in reaching the common goal of conceptualising a postgraduate qualification in terms of possible content for the programme.	Data referring to the value of participants having a voice and being heard, or of them learning from and with one another due to being research partners in a PRA-study.
Sub-theme 2.2: Value of having a voice and being heard.	All data related to participants being listened to and for their ideas being taken into account to inform the development and content of a postgraduate qualification that may benefit teachers in future.	Any data related to participants' experiences of the value of learning from and with one another, or from them benefiting from these relationships and collaboration in support of reaching a common goal.
Sub-theme 2.3: Learning from and with others.	All data capturing instances where participants learnt from one another as part of the community of support that was established during discussions and data generation sessions.	Data related to the participants valuing relationships and collaborations as part of a research process in reaching a common goal, and of them appreciating the opportunity to voice their ideas and be heard.

5.2.2.1 Sub-theme 2.1: Value of relationships and collaboration with peers to reach a common goal

This sub-theme relates to the value of the collaboration that occurred between peers as a result of the PRA-based process that teachers and expert stakeholders formed part of, where they collaboratively compiled suggestions for a postgraduate qualification in visual impairment studies. To this end, the networking that took place between the teachers of different schools and the various expert stakeholders seemingly supported interaction, lively discussions and the sharing of valuable ideas on accommodating learners with visual impairment and what this implies. Photographs 5.18 and 5.19 capture some of the joint discussions and sharing of ideas by the participants.

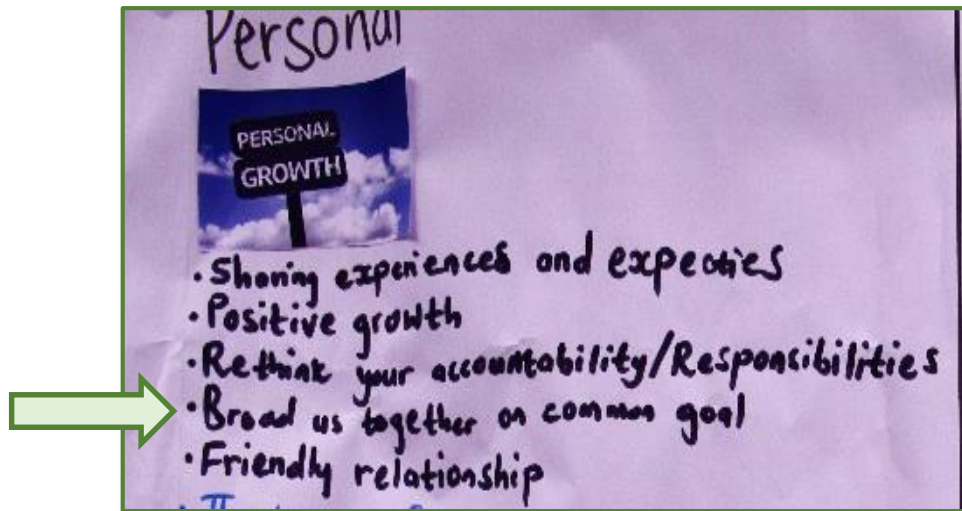


Photograph 5.18: Teacher-participants engaged in a PRA discussion (S8, 14 February 2018)



Photograph 5.19: Stakeholders sharing ideas with colleagues (MC-S, 28 July 2018)

By establishing working relationships and forming sustainable networks, participants were reportedly able to *network with others in sector* (MC-S, 27 September 2018). Stakeholder-participants were furthermore allegedly pleased to collaborate with organisations in the interest of learners with visual impairment as well as with researchers from the University of Pretoria. In this regard, they referred to *collaboration of many Visual Impairment organisations with 1 entity UP – unity* (MC-S, 27 September 2018), indicating this to be beneficial to the profession. In this regard, since the goal for collaboration was eventually to generate ideas for the proposed qualification, I reflected that *the co-construction of knowledge is really working wonders* (RJ, 07 Mach 2018). In support, teachers stated that the project *broad [brought] us together on common goal* (MC-T, 21 July 2018). Photograph 5.20 captures this experienced benefit of participation as research partners in the PRA-project.



Photograph 5.20: Value of collaboration for teachers
(MC-T, 21 July 2018)

During the PRA-based discussions, participants shared ideas and identified priorities that they as a group viewed as important for supporting learners with visual impairment. A central priority identified by them relates to meeting such learners' needs, particularly in the school context, as discussed in Section 5.2.1.2. Participants, for example, mentioned that they could take it upon themselves to ... *invite professionals to assess learners* (PRA-T, S15, 12 April 2018), once again emphasising the importance of relying on others and on established partnerships in the field when supporting learners with disabilities.

Closely related, participants seemingly engaged in joint efforts and relied on collective expertise in supporting learners with visual impairment in schools. In this regard they shared several ideas on possible people to involve as advisors or resources. One of the teacher participants for example suggested that teachers could *request Department of Education to employ Braille instructors* (PRA-T, S16, 16 April 2018). In confirmation, based on my observation that the teachers seemed committed to support all learners, I reflected as follows: *Teachers find it rewarding to be helping and teaching learners with visual impairment* (RJ, 29 January 2018), and later ... *they are proud of the value they add in learners' lives* (RJ, 5 February 2018). Contributions such as these point to the participants' commitment to support learners with visual impairment, be it in the form of support by themselves, or through the facilitation of access to external support services.

It seems clear that participants seemingly realised the value of working together when wanting to achieve the common goal of supporting learners, for example when working with learners with visual impairment. To this end, one of the interviewees mentioned that *the teachers should get together and discuss the general performance* (I9, 20 February 2018, Page 62), indicating the idea of *linking/networking with other schools/officials attending workshops* (PRA-T, S4, 2 February 2018). As such, participants apparently recognised that collaboration is important and can lead to positive results, building on the relationships they established as research partners in the PRA-project. The participants seemed to experience their established relationships as valuable and indicated the need to continue with and build on these, as captured in my reflection that *participants seem motivated to continue with these partnerships* (RJ, 5 March 2018). In sharing ideas for putting their goals into practice, participants similarly referred to *working together was like a building block (building on others ideas)* (MC-S, 27 September 2018).

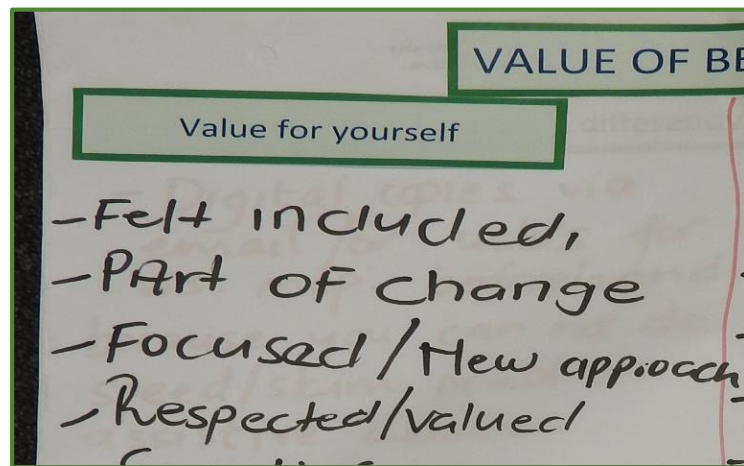
In summary, as research partners, and in collaboration with others, participants thus shared their expert knowledge during discussions on the development of the proposed qualification and what would be beneficial to include in the various modules of the programme. As a result of this collaboration, teachers mentioned that *our schools will improve the way learners with Visual Impairment will be treated* (MC-T, 9 June 2018). Furthermore, collaboration as part of the PRA process seemed to have *revived us to put more effort on the curricular needs of the school with special needs* (MC-T, 21 July 2018) for the sake of the learners. A secondary advantage of collaboration with peers when striving to reach a goal, as actualised in this study, relates to the possibility of improved practice and of the participants facilitating positive change in their own contexts as a result of collaborative discussions. I reflected on this result in the following way: *... educators working closely together, collaborating to give input...* (RJ, 5 March 2018).

5.2.2.2 Sub-theme 2.2: Value of having a voice and being heard

According to the participants, the PRA process created a platform for expressing their ideas on topics related to visual impairment, and a proposed qualification in the field, which may ultimately benefit the visual impairment community as a whole. In this regard, I reflected that *the manner in which stakeholders are showing commitment,*

one would swear that they were never given a chance to talk about things that concerns them (RJ, 27 September 2018). Participants from the South African Council for the Blind confirmed this observation by referring to a motto used by different disability groups that states *nothing about us without us* (MC-S, 27 September 2018), when reflecting on the value they had experienced by being involved in discussions on matters concerning their field of expertise, being visual impairment.

It therefore seems clear that participants valued the opportunity to share knowledge and pave the way for supporting learners with visual impairment more effectively in future. In this regard, I noted that participants *seemed to have experienced an opportunity to be involved in visual impairment issues* (RJ, 27 September 2018). Similarly, in the words of the participants, the PRA-process created a *platform ... for advocacy for learners with visual impairment* (MC-S, 27 September 2018), which they formed part of. They seemed grateful about their knowledge, experiences and expertise being recognised and that an initiative was in progress to document these for the benefit of the visually impaired community. In this regard they stated that PRA *allowed the blind and visually impaired to have their voices heard* (MC-S, 27 September 2018). Participants as a result allegedly *felt included*, as captured in Photograph 5.21.



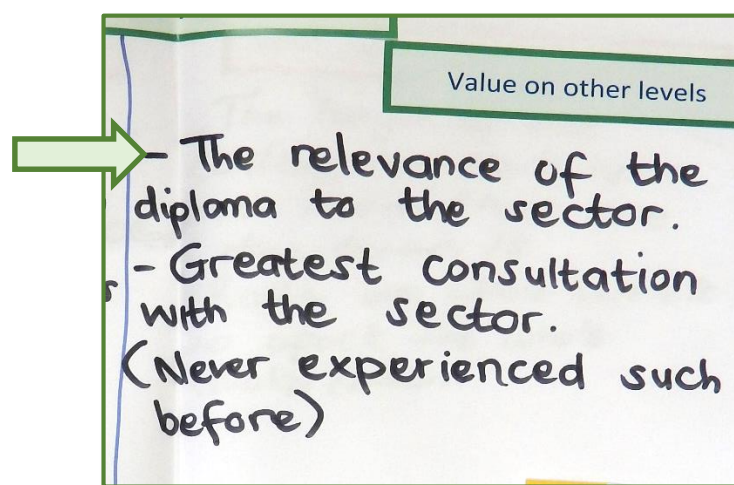
Photograph 5.21: Participants feeling included due to their participation in the PRA process (MC-S, 27 September 2018)

Both the expert stakeholders and participating teachers seemed to value the actions taken by the researchers to involve them in planning and conceptualising the

qualification. In this regard, they voiced appreciation for the *approach and consultations* (MC-S, 27 September 2018). As implied earlier, the value they experienced did not merely relate to their feeling valued and heard, but was equally linked to the foreseen value of their involvement to the broader visually impaired community. In their own words, their involvement implied a *big boost for visual impairment community* (MC-S, 27 September 2018).

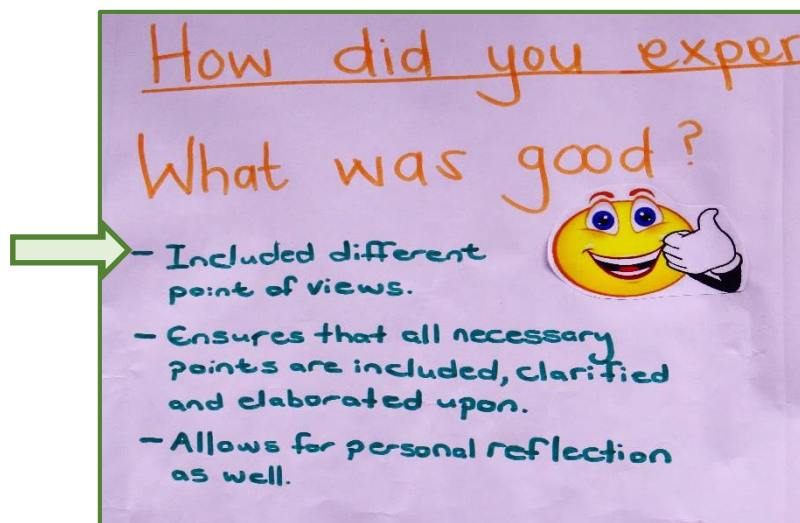
Participants furthermore indicated appreciation for the specific method of consultation that was followed. They explained that the PRA process was *greatest consultation with the sector (never experienced such before)* (MC-S, 27 September 2018), thereby highlighting the trend of people on ground level not often being involved in such processes. The fact that the research team did not merely assume what participants' knowledge and experiences would entail, and what the proposed qualification could entail but rather consulted with relevant parties in the field of visual impairment was thus noticed as valuable.

As such, in providing teachers and expert stakeholders with a voice and listening to their ideas, the PRA principle of consultation with experts on ground level when solving a problem (in this case determining the content of a qualification) implies the possibility of the qualification ultimately addressing the needs of members of this community in future. In view of this, I noted that the participants *seem to notice the future prospering of this qualification as it is needed* (RJ, 27 September 2018). Photograph 5.22 captures this idea.



Photograph 5.22: Stakeholders' appreciation of the proposed qualification (MC-S, 27 September 2018)

In summary, participants seemingly felt that they were part of a community that could contribute to positive change for learners with visual impairment and for other people in general, based on their participation in the project and the nature of the sessions they contributed to. They valued their active involvement and that their experience was valued, with researchers not merely visiting them to impose knowledge on them but rather including them in constructing knowledge that would ultimately inform the development of a qualification. To this end, I noted in my reflection that *stakeholders' active involvement seems to be result of their inclusion in qualification development* (RJ, 27 September 2018). Some of them similarly noted their experience that *all stakeholders were involved* (MC-T, 9 June 2018), which resulted in their feeling acknowledged and that they were valued as knowledgeable in the fields of inclusive education and visual impairment. In being part of a community of practitioners, participants furthermore seemingly appreciated their experience that various ideas and perspectives were acknowledged and included in discussions, as depicted in Photograph 5.23.

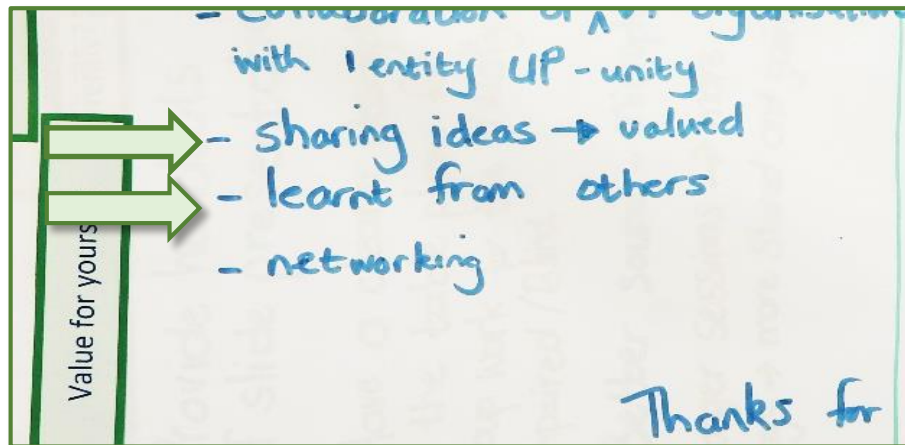


Photograph 5.23: Benefit of different views being acknowledged (MC-T, 21 July 2018)

5.2.2.3 Sub-theme 2.3: Learning from and with others

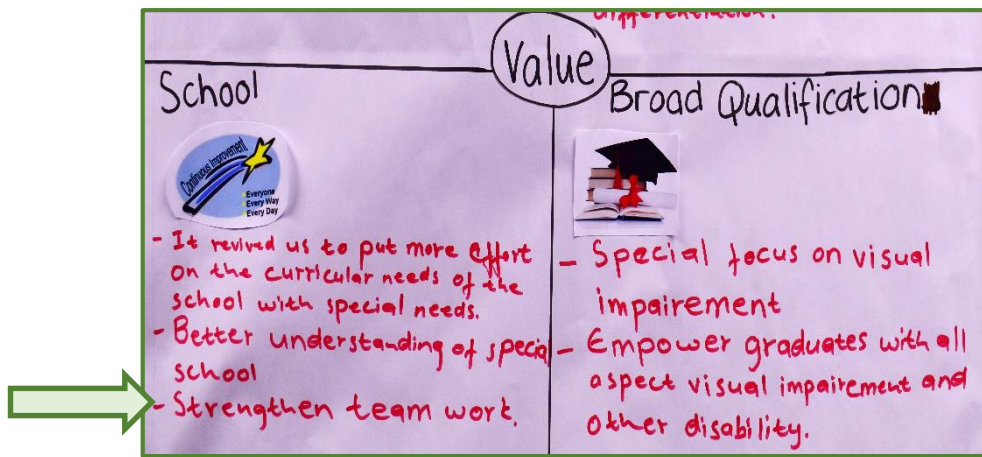
This sub-theme relates to participants valuing their experience of learning from one another as a result of their participation in the PRA-process and the collaborative discussions they engaged in. Participants referred to this experience as *team building which they hadn't had in such a long time while they learn from each other* (FN, 6

March 2018). In addition, they viewed this experience as *interesting, collaborative team work* (FN, 7 March 2018). Photograph 5.24 captures participants' recognition of sharing ideas and learning from one another.



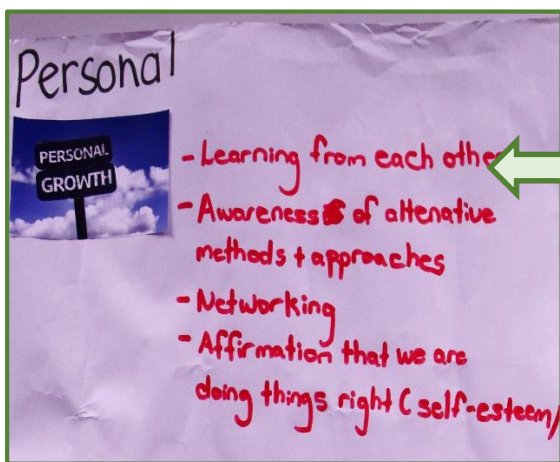
Photograph 5.24: Value attached to the sharing of ideas and learning from one another
(MC-S, 27 September 2018)

In essence, participants related the value of learning from one another to the useful partnerships they formed and the team work they engaged in during the PRA-process. Participants, for example, indicated that the team work they participated in assisted them in gaining more knowledge and learning from fellow teachers and colleagues who worked in different contexts but still in the field of visual impairment. To this end they referred to *learning from other stakeholders dealing with visual impairment* (MC-S, 27 September 2018). To them, the PRA activities they were involved in implied the possibility to *strengthen team work* (MC-T, 28 July 2018) in the small groups where common interests were shared, but also in the future in their respective schools. Photograph 5.25 captures the idea of participants valuing the team work that was facilitated during the PRA-process.

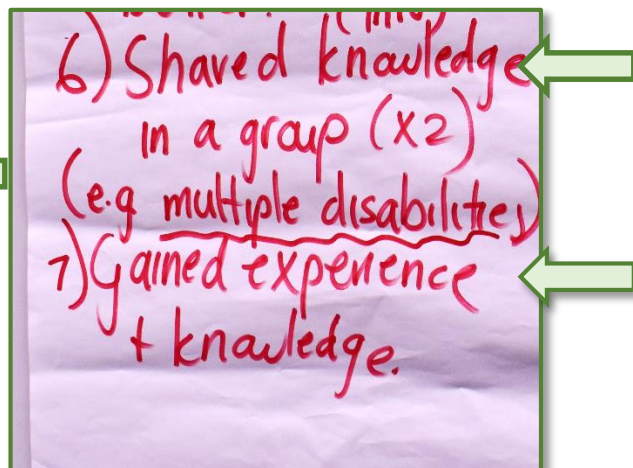


Photograph 5.25: Strengthening team work as a result of participation (MC-T, 28 July 2018)

Moreover, while they were learning with and from one another, participants were seemingly also able to hone their interpersonal skills as a result of their participation in PRA-based activities. In the words of the participants, PRA assisted them with *good relations established* (MC-T, 9 June 2018) and gaining by *learning from each other* (MC-T, 21 July 2018), and sharing knowledge and expertise, as captured in Photographs 5.26 and 5.27.



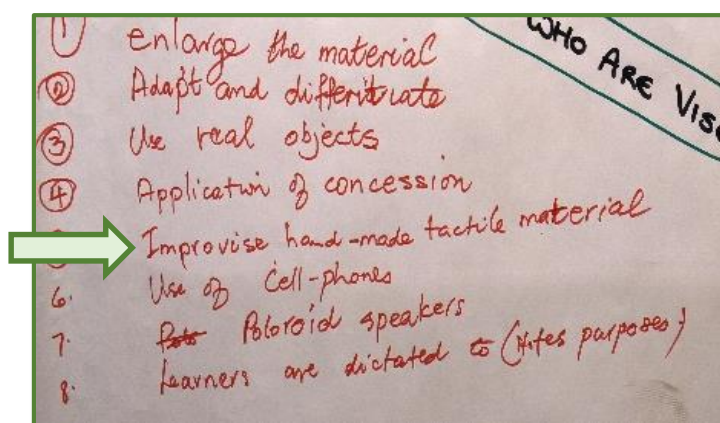
Photograph 5.26: Participants learning from one another (MC-T, 6 June 2018)



Photograph 5.27: Participants gaining knowledge from one another (MC-T, 21 July 2018)

Some participants viewed this communal experience as a way of forming a community of support. In this regard, PRA activities allegedly allowed for a space where *shared experiences have created a community of support for educators of learners with visual*

impairment (MC-S, 27 September 2018). By being part of this community of support, participants were able to increase both their knowledge and practical skills on working with learners with visual impairment while also sharing their ideas with others. They, for example, stated that they acquired skills to *improvise hand-made tactile material* (PRA-T, S15, 12 April 2018) as well as other accommodative material, as depicted in Photograph 5.28.



Photograph 5.28: Teachers being accommodative (PRA-T, 12 April 2018)

In addition to the participants benefiting by learning from one another, they valued the positive effect it implied for learners with visual impairment. To them, their newly acquired knowledge and skills could benefit their practice when working in the field of visual impairment as part of a team. One of the teacher participants explained this in the following way: *Learners with visual impairment have a unique educational need which is mostly effectively met by using a team approach of educators, parents, and the district officials* (I9, 20 February 2018, page 54).

5.2.3 Theme 3: Value for personal and professional development of the participants

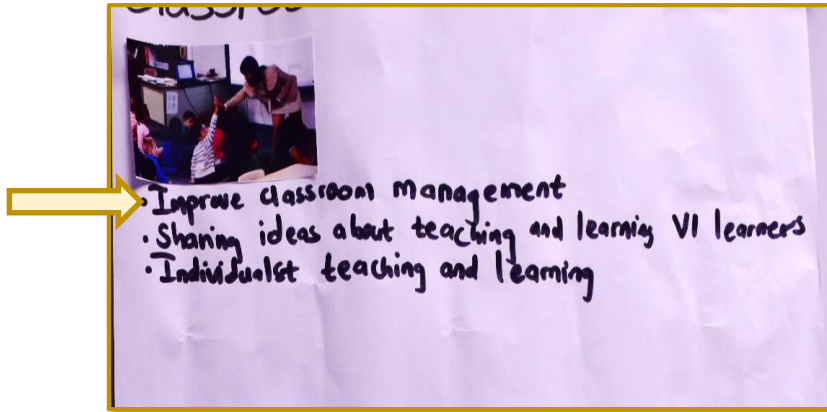
The third theme that I identified captures the significance of participation in the PRA process in terms of the personal and professional development of the participants, as perceived by them. Three sub-themes apply, as captured in Table 5.4, where I indicate the criteria I used to include or exclude data in a specific sub-theme.

Table 5.4: Inclusion and exclusion criteria for Theme 3

Theme 3: Value for personal and professional development of the participants		
	Inclusion criteria	Exclusion criteria
Sub-theme 3.1: Increased awareness of own competence and commitment.	All data related to participants becoming aware of their own competence, valuing their own contributions, or realising their work-related responsibilities.	Data related to participants realising the significance of training and further training, or to them feeling empowered in contributing to positive change.
Sub-theme 3.2: Realising the importance of training and further training.	Data related to participants realising the value and importance of being trained in the fields of visual impairment and inclusive education to implement it successfully in practice.	Data that related to participants becoming aware of their competence, feeling empowered, or committing to contributing to positive change.
Sub-theme 3.3: Feeling empowered in forming part of positive change.	All data related to participants realising that they can take control and contribute to positive change.	Data related to participants realising the significance of training for their own development, or to their feeling competent and committed to implement inclusive education policy with learners with visual impairment.

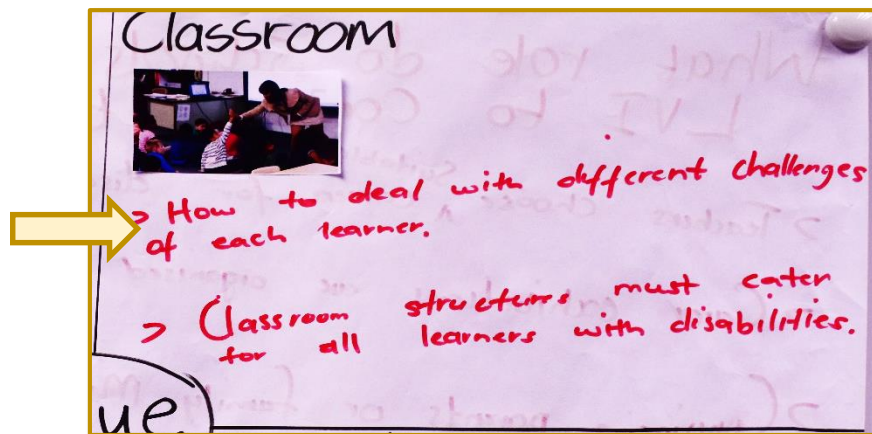
5.2.3.1 Sub-theme 3.1: Increased awareness of own competence and commitment

In terms of the teachers realising that they were already making a contribution in supporting learners with visual impairment, participants specifically reported that the information they shared with one another during PRA-discussions and activities enhanced their awareness of the skills they already possessed to teach and support these learners. As a result, they indicated that their involvement in the PRA-based activities *improved the learning and teaching methods* (MC-T, 21 July 2018). They did, however, acknowledge that there was still room for improvement in terms of their knowledge and skills on specific aspects, with one example indicated in Photograph 5.29.



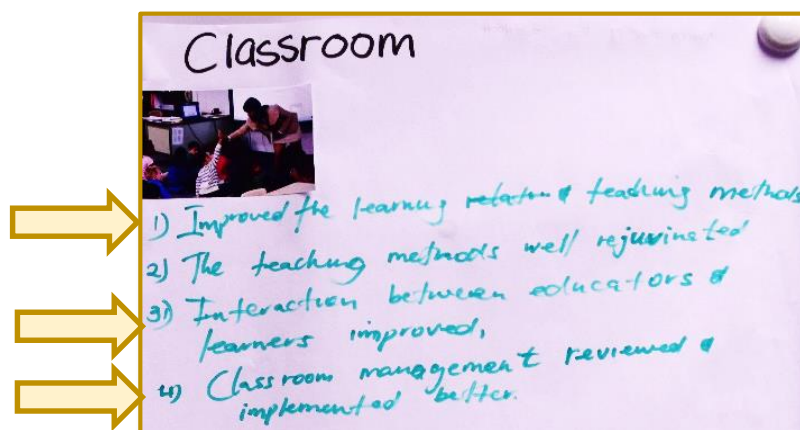
Photograph 5.29: Participants' need to improve their skills
(MC-T, 21 July 2018)

In this regard, participants indicated that they subsequently gained skills as the project and PRA-discussions progressed, thereby addressing this identified need. Moreover, during the member-checking sessions, participants indicated that they gradually gained better classroom management skills due to being involved in the project and discussions, as alluded to in contributions such as the following: *Improve classroom management* (MC-T, 21 July 2018), *classroom management implemented better* (MC-T, 21 Jul 2018) and *expanding knowledge of classroom management and teaching methodology* (MC-T, 09 June 2018). Contributions such as these indicate that some teachers seemingly possessed existing knowledge of classroom management at the start of the project, yet that this was expanded during their participation in the study, with participants sharing good practices on managing classrooms especially during informal conversations. Participants furthermore reported that they subsequently applied the newly gained knowledge and skills in their classrooms, as captured in Photograph 5.30.



Photograph 5.30: Improved skills as a result of participation in the project (MC-T, 21 July 2018)

Participants reported that they acquired insight and additional skills to apply in the general classroom and for teaching practice when engaging with learners with visual impairment and interacting with one another as teachers. For example, they referred to *improved interaction amongst educators* (MC-T, 28 July 2018). In this regard, participants indicated that they specifically gained insight into the manner in which they could view, interact with and teach learners with disabilities, particularly those with visual impairment, stating that *interaction between educators & learners improved* (MC-T, 9 June 2018) due to their participation, as captured in Photograph 5.31.

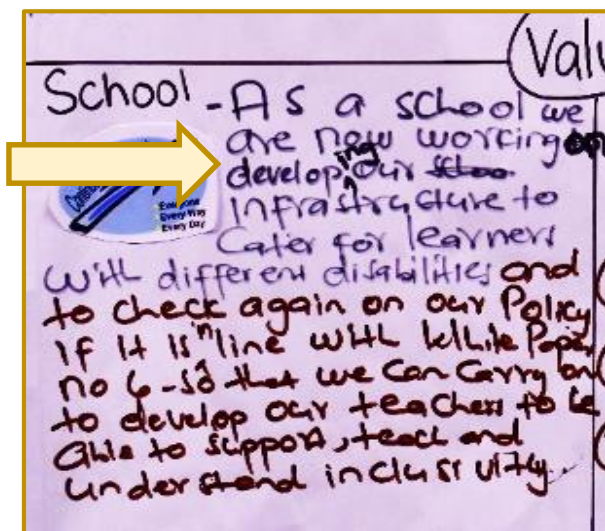


Photograph 5.31: Teacher participants' improved skills and responsibilities as a result of their participation (MC-T, 09 June 2018)

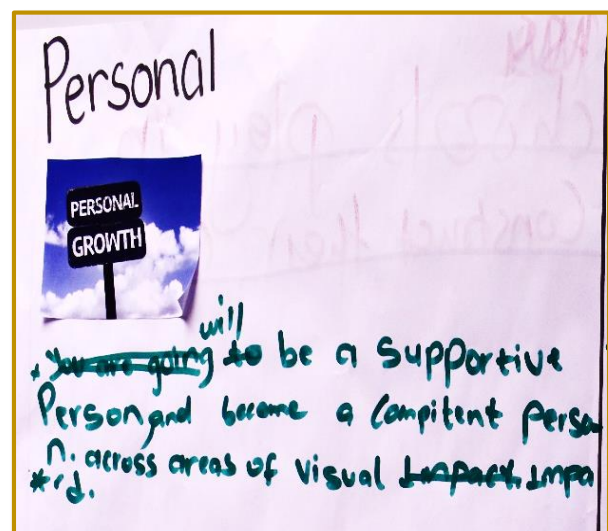
As indicated, the knowledge the participants reportedly gained through participation in this study apparently assisted them in realising that their contributions were valuable. In terms of the PRA-process, participants stated that the process was *open and fair process for people to contribute their views and experiences* (MC-S, 27 September

2018). To this end, I noted the participants' commitment in the following: *All teachers contributing to the activity* (FN, 17 April 2018). I furthermore observed that *teachers using their experiences in the classroom to contribute to the activity* (FN, 12 April 2018), thereby pointing to the possibility of viewing their contributions as being appreciated and of value when developing the qualification.

Next, participants indicated that their awareness of work-related responsibilities increased as a result of their participation in the PRA-discussions, more specifically in terms of implementing inclusive education and working with learners with visual impairment. They indicated their realisation that all teachers had to be more helpful to learners in the classroom and school context, after being exposed to the information discussed as part of the PRA-based discussions. According to the teacher participants, they had to *help them* (learners with visual impairment) *adapt to the environment* (PRA-T, S15, 12 April 2018). In this regard, participants apparently became more aware of the importance of the school and teachers being accountable to support learners with visual impairment in various manners, as depicted in Photographs 5.32 and 5.33. This idea is furthermore captured in the following contribution: *Rethink your accountability/ responsibilities* (MC-T, 28 July 2018).

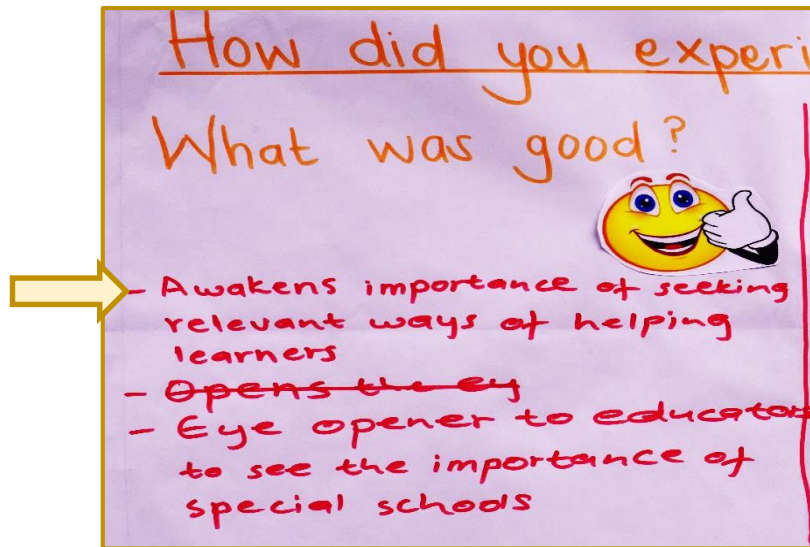


Photograph 5.32: School and teacher participants' responsibility for suitable infrastructure (MC-T, 28 July 2018)



Photograph 5.33: Teacher participants' supportive responsibility (MC-T, 9 June 2018)

In confirmation, participants stated that the PRA-based discussions *awaken importance of seeking relevant ways of helping learners* (MC-T, 9 June 2018), as captured in Photograph 5.34. They referred to the importance of *teacher must have knowledge about Braille so that they can help learners easily* (PRA-T, S10, 6 March 2018).



Photograph 5.34: Participants being aware of their responsibility to support learners (MC-T, 9 June 2018)

In terms of physical resources, we (the research team) observed several reading, writing and Mathematics resources at some of the participating schools, as captured in my field notes in the following way: *Media centre has a smart board, computers, Braille printer, printed magazine, Maths work books retyped in Braille* (FN, 29 Jan 2018). At some schools, learners had their own Braille machines, noted by me as follows: *Each learner is sitting with a Braille machine* (FN, 6 March 2018). As such, participants seemingly once again noticed that their schools were able to offer support in terms of accommodating learners with visual impairment, despite the indicated need to gain more competence in the use of Braille in the classroom.

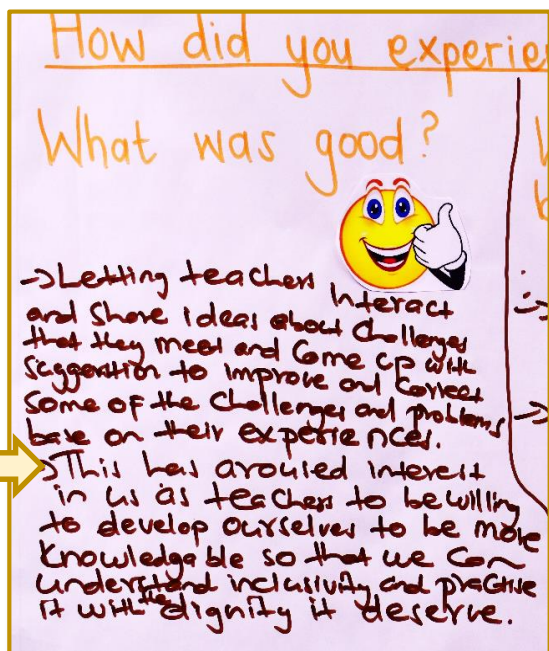
It follows that the participants' involvement in the PRA-based process apparently confirmed their competence and contributions. In addition, it reinforced their commitment to strengthen their skills and the support provided to learners in their class. This in turn implied the potential of development – both on personal and professional level.

5.2.3.2 Sub-theme 3.2: Realising the importance of training and further training

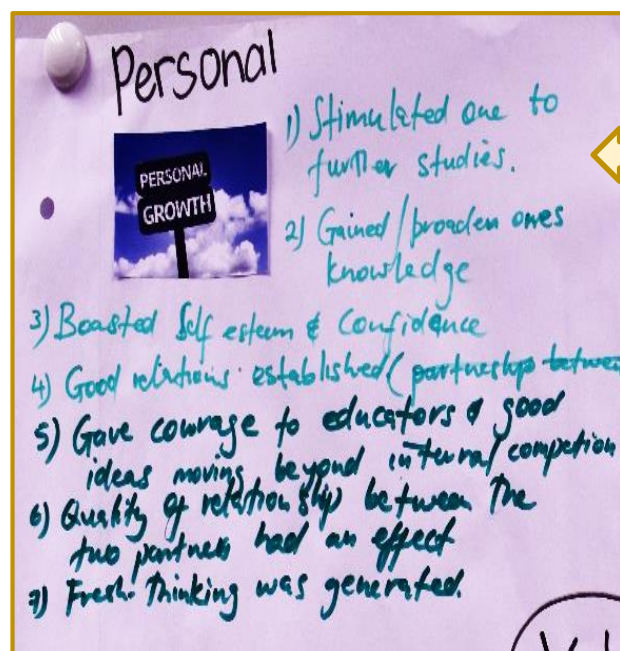
Participation in this PRA study seemingly increased the teachers' levels of valuing training and further training. Participants indicated that their limited training on inclusive education and visual impairment had a limiting effect on their teaching and support of learners with visual impairment in the past. In response to the PRA-prompt related to the needs of teachers when working with learners with visual impairment, the participants referred to the need for *special training on working with visually impaired learners* (PRA-T, S15, 12 April 2018) and *Training of how to deal with visually impaired learners; Training on how to identify learner with visual impairment; Training of how to take care of them; Training on how to use resources relevant to the visual impaired disability* (PRA-T, S16, 16 April 2018).

Many teacher participants referred to not being sufficiently trained in the implementation of inclusive education. I captured this perception in the following way in my field notes: *Participants mentioned that they never received training on IE and they are battling to respond to some questions* (FN, 6 March 2018), and at another school, *no IE training has been brought to the school* (FN, 14 February 2018). When discussing training opportunities and training sessions on inclusive education, participants shared their view that departmental officials who were responsible for training teachers seemingly possessed limited understanding of the skills required by teachers to be able to do this. They referred to the need for *more training for teachers and LF⁹s* (PRA-T, S14, 15 March 2018), and stated *as long as there is no training, even to the officials, then it will be difficult for teachers themselves support the learners as required* (I4, 21 February 2018, p. 25). When teachers from full service schools and special needs schools jointly attended the member-checking colloquiums, those from full service schools indicated that they were experiencing limitations in various areas that concerned disability. They seemingly realised that they had to empower themselves by furthering their studies, as alluded to in the following contribution: *Stimulated one to further studies* (MC-T, 28 July 2018). Photographs 5.35 and 5.36 attest to this view held by the teacher participants.

⁹ Learning facilitators based at district level.



Photograph 5.35: Participants indicating commitment to further professional development (MC-T, 9 June 2018)

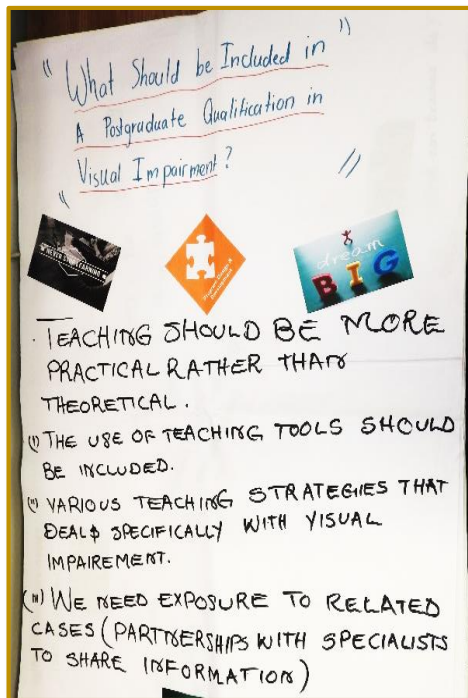


Photograph 5.36: Participants indicating a willingness for further training (MC-T, 28 July 2018)

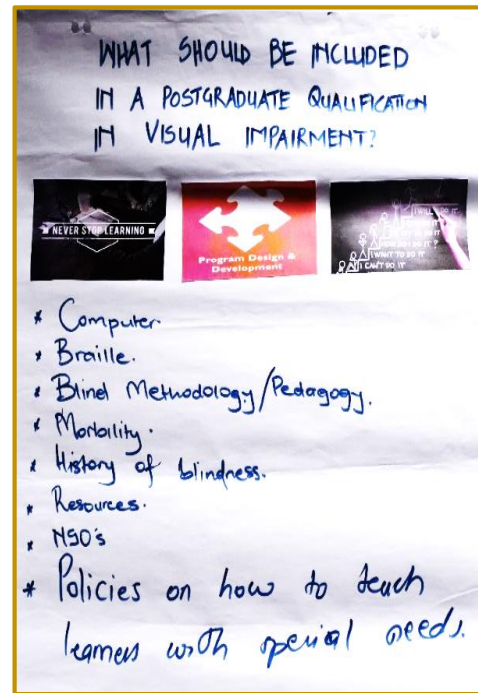
In addition to the belief that the training they had received had not been sufficient, teacher participants referred to *lack of support from health professionals* (PRA-T, S9, 6 March 2018), *lack of support from the department* (FN, 14 March 2018) and *lack of understanding by officials on the practical implications of inclusive education* (PRA-T, S3, 29 June 2018) as factors that negatively affected the support provided to learners with visual impairment in the classroom. As such, even though teachers allegedly received initial training on inclusive education policy, they indicated the need for continued support and follow-up training sessions, which was reportedly not met.

Some participants shared the view that further formal training could benefit all teachers in acquiring adequate knowledge on visual impairment, for all teachers to be suitably equipped to support these learners. They explained this idea as follows: *But I still believe that I need training, I still believe that I need formal training yes so ja its very very necessary for one to get training* (I5, 5 February 2018, p.32), and *although experience played a big role, training is also necessary* (RJ, 7 February 2018). This emphasis on both initial and further training, which include in-service opportunities, once again points to the potential of personal and professional development of the participants. In terms of the teacher participants' views on focus areas for such training, some ideas are captured in Photographs 5.37 and 5.38. As depicted in these

photographs, the need for training focused on acquiring basic knowledge as well as practical skills that can be applied by teachers in the classroom.



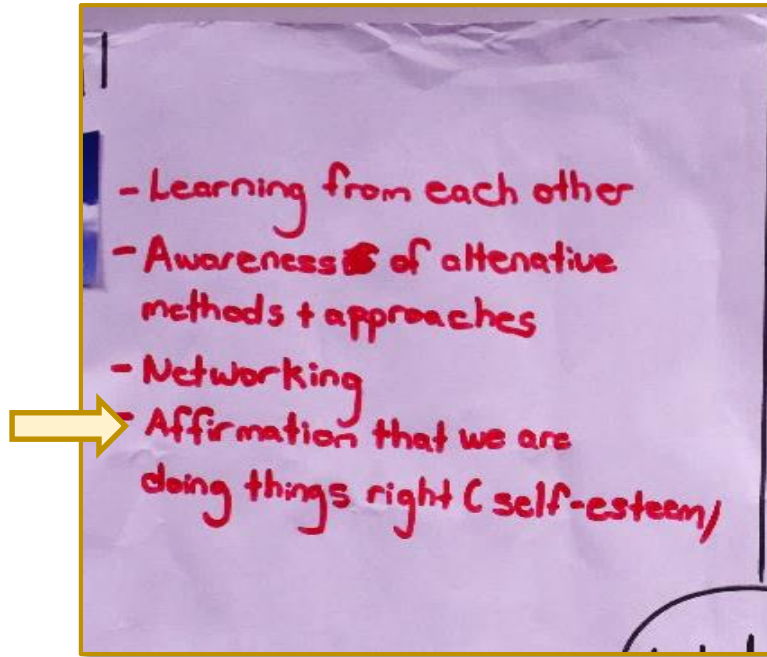
Photograph 5.37: Guidelines for teacher training (PRA-T, S11, 7 March 2018)



Photograph 5.38: Example of teacher training needs (PRA-T, S12, 13 March 2018)

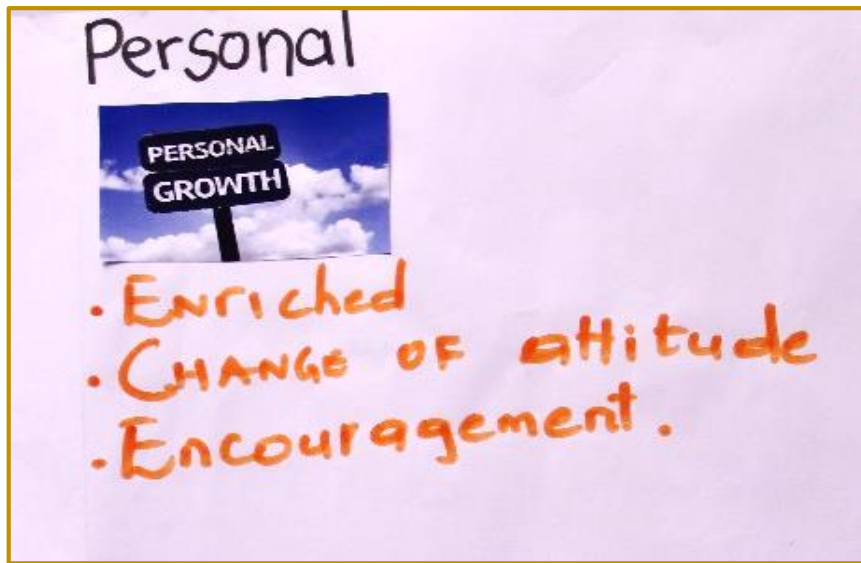
5.2.3.3 Sub-theme 3.3: Feeling empowered in forming part of positive change

Participants seemingly experienced an increased awareness of their own capabilities and commitment to contribute to the development of the proposed qualification in support of learners with visual impairment, as a result of their participation in the PRA-process. They reportedly realised that they possessed resources they could rely on, both within and external to themselves as a result of the discussions they engaged in and as the PRA-process unfolded. Participants appeared to become more aware of the fact that they themselves could offer something when working with learners with visual impairment as a result of their participation in the PRA-based discussions and activities. They specifically noted that the PRA-sessions helped in *confirmation that policies and systems are in place and realise that can still improve and develop* (MC-T, 28 July 2018). In this regard, participants seemed gradually to realise that they were already making some kind of a difference, as captured in Photograph 5.39, subsequently resulting in feelings of empowerment and positive change.



Photograph 5.39: Teacher participants' realisation of their positive contribution (MC-T, 9 June 2018)

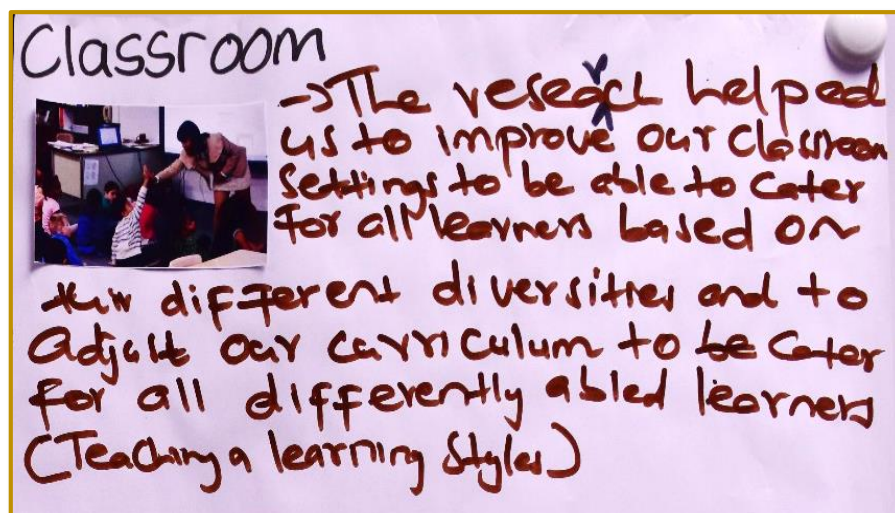
Participants furthermore related their experience of being motivated and forming part of positive change to their participation in the PRA study. They mentioned *more motivated* (MC-T, 21 July 2018), and to being partners in the development of a qualification contributing to *positive growth* (MC-T, 28 July 2018) for participants. They seemingly realised that this qualification could bring about positive change in the field of inclusive education and visual impairment. In this regard, I reflected that *they seem to be convinced that this qualification will definitely assist teachers, therefore their becoming part of positive change* (RJ, 27 September 2018). I furthermore observed the participants to feel *empowered & capacitated* (MC-S, 27 September 2018), and as if they were *part of change* (MC-S, 27 September 2018). Photograph 5.40 captures these ideas.



Photograph 5.40: Participants' feelings of being empowered
(MC-T, 9 June 2018)

Based on their involvement as partners in the PRA-based study, the participants' feelings of self-worth allegedly improved. As the study progressed and they gained confidence in working with learners in the inclusive context, these positive feelings were strengthened. In this regard, participants mentioned that the PRA activities *boosted self-esteem and confidence* (MC-T, 9 June 2018).

Some improved feelings of self-esteem could be observed in teachers of both full service and special needs schools, with teachers from full service schools reportedly feeling more able to teach learners with visual impairment after learning about suitable skills from their colleagues at special needs schools. To this end, I noted that *there seems to be increased confidence ...* (RJ, 7 February 2018). As a result, participants were seemingly encouraged to do more in their schools and classrooms in terms of implementing inclusive education and accommodating learners with visual impairment, as captured in Photograph 5.41, with the implication of them contributing to positive change.



Photograph 5.41: Teachers feeling encouraged to support positive change (21 July 2018)

5.2.4 Theme 4: Recommendations for future application of the PRA process

The final theme identified during thematic data analysis entails recommendations by the participants that may enhance future implementation of the PRA process. Even though the data generated for this theme was not as extensive as for the other themes, the results obtained may inform future studies of a similar nature. The inclusion and exclusion criteria for the theme are summarised in Table 5.5.

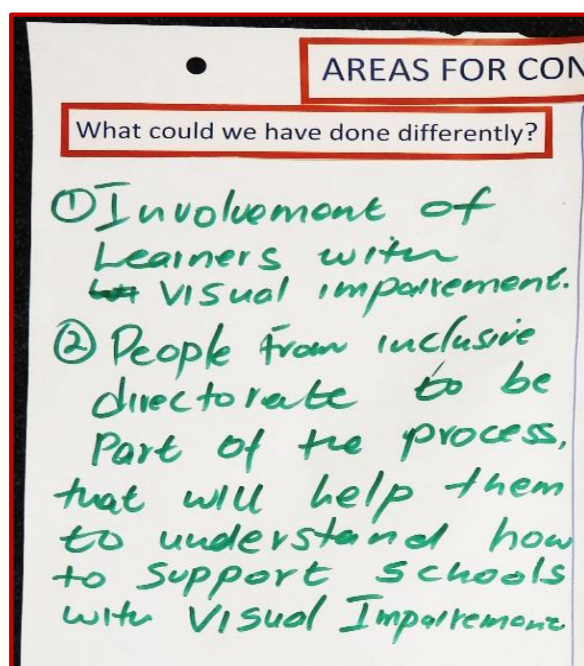
Table 5.5: Inclusion and exclusion criteria for Theme 4

Theme 4: Recommendations for future application of the PRA process		
	Inclusion criteria	Exclusion criteria
Sub-theme 4.1: Involving more participants from additional sectors in society.	All data related to the number of participants involved in a PRA-study, when involving experts and professionals.	Data related to the time allocated to PRA-based activities and to participants with special needs being accommodated according to their needs.
Sub-theme 4.2: Allowing more time for the PRA process to unfold.	Data related to the time allocated to PRA-based activities and discussions.	Data related to sample size, or to an awareness and accommodation of participants' special needs.
Sub-theme 4.3: Remaining aware of and accommodating the special needs of participants.	Data that related to researchers being sensitive to special needs and more inclusive when involving participants with such needs.	Data related to the allocated time for PRA-based activities or the sample size that may be expanded.

5.2.4.1 Sub-theme 4.1: Involving more participants from additional sectors in society

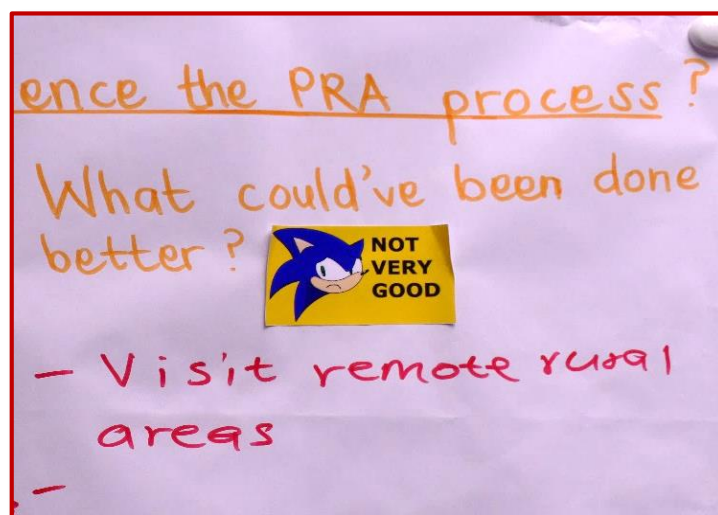
Participants seemingly held the view that the sample size could have been bigger and involved additional participants. In this regard, they pointed out that the project could *reach more people* (MC-T, 9 June 2018) if more participants were to be involved. Some of the participants, for example, suggested *involvement of learners with visual impairment* (MC-S, 27 September 2018) as an additional group of participants. In support of this view, while observing a lesson at a school I wondered *how blind learners conceptualise colour* (RJ, 7 February 2018) yet I did not ask any learner about this. Upon reflection, I realise that it may perhaps have been appropriate to ask one of the learners, instead of only obtaining teachers' views.

In addition to the suggestion to include learners, the participants recommended that *people from inclusive directorate to be part of the process, that will help them understand how to support school with visual impairment* (MC-S, 27 September 2018), as captured in Photograph 5.42. Besides such external potential participants, some teachers recommended that the researchers invite *more teachers for both FSS and special schools* (MC-T, 21 July 2018).



Photograph 5.42: Suggestions for additional participants (MC-S, 27 Sept 2018)

When reflecting on small group discussions, participants indicated that more attention could have been paid when participants worked in these groups to ensure that groups included people from similar backgrounds. Teacher participants namely suggested that researchers may benefit when planning sessions to ensure that *full service school teachers to converge together but not with special school because our experiences are not the same* (MC-T, 9 Jun 2018). Some participants recommended the inclusion of additional specific groups of participants, suggesting to *include more teachers on post level 1 teachers, who are subject specialists* (MC-T, 9 June 2018), based on the potential contribution that such a group of participants can make as a result of their specialised experience. Finally, despite the visual impairment community sometimes being difficult to reach, some participants suggested that the research team could also *visit remote rural schools* (MC-T, 21 July 2018) in the quest to increase the sample size and compilation, as captured in Photograph 5.43.



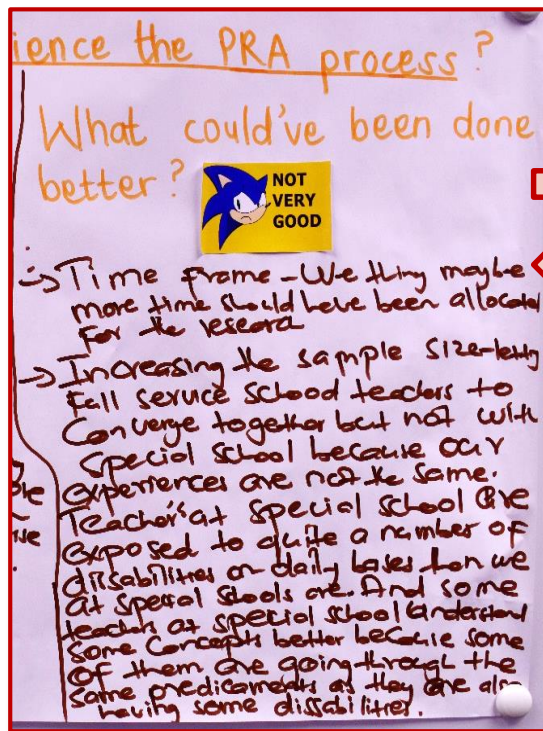
Photograph 5.43: Participants' suggestion for sample selection (MC-T, 21 July 2018)

5.2.4.2 Sub-theme 4.2: Allowing more time for the PRA process to unfold

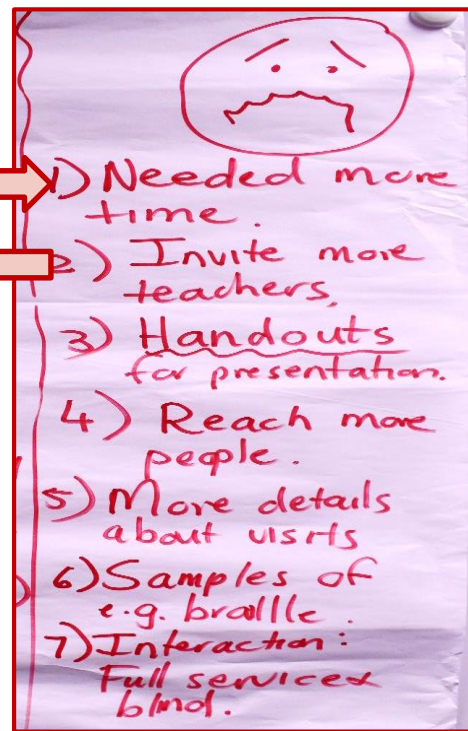
This sub-theme captures the participants' views on the time allowed for the PRA process, including the time allocation for individual sessions. Participants seemingly experienced the time that was allowed for the research project to be too limited, stating that *time frame - we think maybe more time should have been allocated for the research* (MC-T, 21 July 2018), and *needed more time* (MC-T, 9 June 2018). Some participants were more specific in terms of their recommendation for an extended

period of time, indicating that they wanted to refine their ideas and make additional contributions, requiring *enough time to be given* (MC-T, 28 July 2018). In support of this view, at some schools where small group presentations could not be included due to time constraints, I similarly noted that *if time allowed, presentations could have been interesting* (RJ, 1 February 2018).

Closely related, some expert stakeholders indicated that the number of days for discussions with them could have been increased. To this end, they recommended *larger sessions – more days – more shared and gained* (MC-S, 27 September 2018). These experiences of the participants that the allocated time was not sufficient are captured in Photographs 5.44 and 5.45.



Photograph 5.44: Recommendation to allow more time for such a project (MC-T, 21 July 2018)



Photograph 5.45: Indication of the allocated time being too limited (MC-T, 28 July 2018)

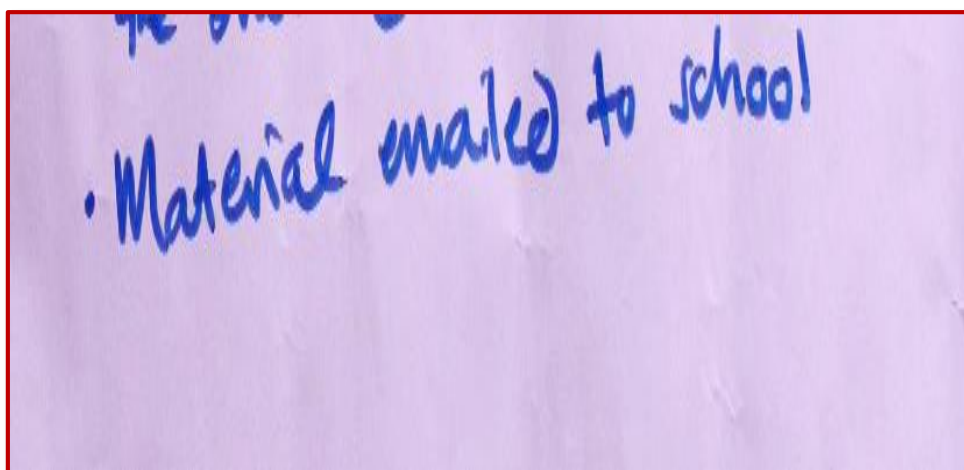
In confirmation of the participants' experiences, the research team perceived the time for PRA-based sessions as not being long enough. At one of the schools we subsequently had to adapt the planned activities, as reported on in the following way in my field notes: *Unfortunately due to time, presentations did not take place and 3 posters were completed* (FN, 17 April 2018). At another school, some participants were occupied with school responsibilities, with school management suggesting that *teachers will work on them during their free time tomorrow* (FN, 14 March 2018). At

yet another school, the research team had to commence with explanations of the PRA-matrices while teachers were still having lunch *due to time restrictions* (FN, 7 March 2018). In all these cases, time was limited due to decisions by school management, based on the availability, responsibilities and situations of the teachers. However, in the case of member-checking colloquiums no such limitations were experienced by the research team, due to all teacher colloquiums being conducted on Saturdays instead of a week day after school, as was the case with data generation sessions.

5.2.4.3 Sub-theme 4.3: Remaining aware of and accommodating the special needs of participants

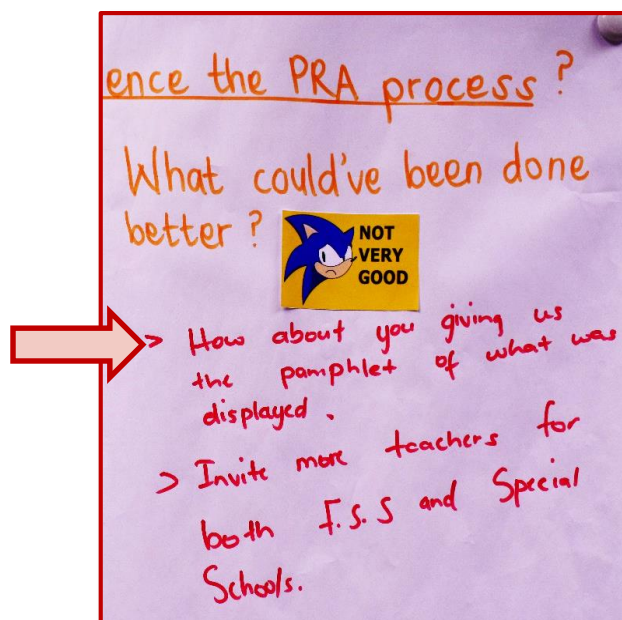
Some of the teachers and expert stakeholders that attended the two stakeholder colloquiums were blind or partially sighted. When reflecting on the process and their involvement, these participants indicated that they would have been able to better prepare themselves if they had received supportive documents prior to the meetings/sessions. As no written information on the sessions had been distributed to the participants prior to the colloquiums, they indicated that their special needs had not been attended to. I captured this experience in my reflections, referring to *unhappiness from some stakeholders because of no Braille programmes and presentations* (RJ, 25 April 2018).

As a potential solution, participants suggested that background information prepared in Braille be sent to participants beforehand when planning similar sessions in future. Participants specifically recommended that *(Programme) Documents being circulated on time (days before)* (MC-S, 27 September 2018), requesting *hardcopies of slides or email before* (MC-S, 27 September 2018), *digital copies via email/or usbs for VI beforehand because you cannot do speed/skim read on assistive devices* (MC-S, 27 September 2018), and *material emailed to school* (MC-T, 21 July 2018). This recommendation is captured in Photograph 5.46.



Photograph 5.46: Suggestions for accommodating participants' special needs (MC-T, 21 July 2018)

Closely related, due to the fact that not everyone was able to see the presentations as they took place, participants requested the research team to *provide handouts of slide presentations* (MC-S, 27 September 2018) and *large print for people who are partially sighted* (MC-S, 27 September 2018). They furthermore requested additional support in the form of *someone with some visual impairment to work with the team* (MC-S, 27 September 2018) who could assist with foreseeing special needs and accommodating these participants in a more sufficient way. Photograph 5.47 captures the participants' request.



Photograph 5.47: Participants' request to have access to visual material (MC-T, 28 July 2018)

On a very practical level, participants commented on the buildings that were used for meetings, requesting the research team to *consider implications = effect on O + M*¹⁰ (MC-S, 27 September 2018). As such, they indicated the need to be accommodated in terms of mobility needs and access to the selected venue. In addition, participants suggested the provision of *a clearer description of the table plans for group work for visually impaired/blind* (MC-S, 27 September 2018), once again in support of their orientation and mobility needs.

Finally, participants indicated the need for regular updates on the progress of the study and therefore the development of the qualification. They specifically referred to *more regular updates on the progress of the process* (MC-S, 27 September 2018), indicating the need to remain informed about whether or not the development of the qualification progressed as planned. This recommendation relates to my reflection that *recap is needed as participants were not informed of the progress for about four months* (RJ, 27 September 2018), following the second colloquium we facilitated. Additionally, participants indicated the need for examples of previous research, requiring e.g. *more detailed videos* (MC-T, 9 June 2018). In summary, even though all the participants' special needs were not adequately accommodated, the research team considered the participants' needs and attempted to address some of these. More attention was paid to this aspect for the second colloquium based on the lessons learnt during the first meeting with the expert stakeholders.

5.3 CONCLUSION

In this chapter I discussed the results of my study. I presented the four main themes I identified, explaining each in terms of the related sub-themes that emerged during thematic data analysis. In discussing the themes and sub-themes, I included excerpts and examples from the data sources, thereby substantiating my presentation of the results. In the following chapter, I discuss the findings of my study. For this purpose I situate the results I obtained against the background of existing literature, as discussed in Chapters 2 and 3. I attend to correlations, contradictions, silences and new insight.

¹⁰ O + M – Orientation and Mobility

CHAPTER 6

FINDINGS OF THE STUDY

6.1 INTRODUCTION

In the previous chapter, I presented the results of the study. I discussed the four themes and related sub-themes, which relate to the utilisation of PRA to access research partners' knowledge and expertise, the value of being research partners in the PRA process for the participants, the professional and personal development of the participants, and recommendations for future application of PRA in research studies of a similar nature.

In the current chapter, I present the findings of my study by interpreting the results against the background of the literature I discussed in Chapters 2 and 3. For this purpose I discuss correlations, contradictions, new insight and silences I identified in interpreting the data. In preparation of my discussion of the findings I compare my results in tabular format with existing literature (Consult Appendix N).

6.2 VALUE OF PRA WHEN ACCESSING RESEARCH PARTNERS' KNOWLEDGE AND EXPERTISE

The findings of this study indicate that PRA is suitable for accessing research partners' knowledge and expertise on specific topics. Through the application of PRA I was able to access teachers' understanding and perceptions of inclusive education policy, visual impairment and the associated needs and implications when accommodating learners with visual impairment in the classroom. In addition, I was able to access teachers' and stakeholders' ideas for a postgraduate programme in this field, targeted at teachers. Even though the participants' understanding of inclusive education policy and visual impairment seemed limited, PRA allowed me to access what they knew and had experienced in these areas. Throughout my study, the participants were taken to be experts in the field, and I regarded their views and all contributions as valuable.

6.2.1 Accessing participants' insight into inclusive education policy and supporting learners with visual impairment

I found that the teachers who participated in this study primarily regarded inclusive education as an approach that does not discriminate against any learners but respects and accommodates all learners in the school environment. According to the participants, inclusive education implies equal opportunity and access to resources and quality education for all. This view broadly aligns with the policy document of the Department of Basic Education (2001), which in essence views inclusive education as the accommodation of diversity. In concurrence, the Bill of Rights for All Children with Visual Impairment and their Families (AER & COSB, 2019) stipulates that learners with visual impairment require and should be provided with resources that are relevant for their learning. Eckman (1993) similarly maintains that for learners with visual impairment to reach their potential, they should be exposed to resources that will enhance their learning, respect diversity and the human rights of all learners (Datta & Talukdar, 2016).

In support, Forlin (2010) proposes that learners with disabilities be accommodated at the same school as those without disabilities. In the same way, Landsberg et al. (2005) view inclusive education as schools' practice to include all learners without discrimination, a view that is aligned with the participants in my study's views of inclusive education. In addition, according to Coetzee (2016), inclusive education embraces diversity, which is also what inclusive education implied for the participants in the current study, more specifically in terms of teachers being required to teach learners from diverse backgrounds and abilities in the same classroom.

On a practical level, teacher participants in this study indicated that they were applying accommodation and adaptation in an attempt to create inclusive classrooms, even for learners with visual impairment. This finding aligns with the work of Bayram et al. (2015) who define a non-discriminatory classroom environment as one that promotes inclusive instruction and learning for children with, for example, visual impairment. These authors (Bayram et al., 2015) believe that learners with visual impairment deserve to be treated with the same respect as their sighted peers and that inclusive education can encourage them to participate fully in learning activities and prevent them from withdrawing from activities inside and outside the classroom.

Examples of adaptation done by the teachers who participated in my study include their attendance to sufficient space for learners with visual impairment to move around, changing seating arrangements and providing large print material, to mention but a few. In their attempt to create inclusive classrooms that cater for the needs of all learners, teacher participants in this study mentioned strategies such as teaching orally, with repetition to ensure that learners understood, attending to classroom re-arrangement in terms of seating and including tactile methods of teaching. This finding underscores the work of the American Foundation for the Blind (2011), stating that for learners with visual impairment to develop and optimally benefit from the instruction and learning process, teachers need to attend to adaptation.

In addition to participants emphasising the importance of the classroom environment, they referred to the general school environment. They mentioned methods such as flattening the school ground, removing toxic and dangerous material where learners are meant to walk, and ensuring that signage posts are clear, to mention a few examples. They furthermore emphasised the value of providing orientation and mobility training for learners with visual impairment to accommodate these learners in the school context. This finding is confirmed by Lamichhane (2017) who states that learners with special needs require some adjustments to be made so that they feel included and that they belong to the particular classroom/school environment. Such adjustments may in turn enhance their social interaction with other learners.

In the same manner that instruction and learning strategies are adapted, assessment measures need to be revised when teaching learners with visual impairment. In this regard I found that many of the teacher participants at special needs schools attended to this by ensuring that assessment tools were suitable for the learners, for example, by allowing learners who used Braille to do assessment tasks in Braille. However, some teachers felt that as long as textbooks and question papers were not adapted, learners with visual impairment were still left behind. At some schools, teachers informally mentioned that there were no people that had been trained to mark Braille examination papers of matriculants. These findings raise the question whether or not learners with visual impairment are truly being accommodated as they are supposed to. In the midst of these contradicting findings, Kamal (2017) maintains that assessment needs to be adapted for these learners not to be deprived of the opportunity to display their knowledge of what they have been taught.

In terms of the participants' insight concerning the needs of learners with visual impairment I found their knowledge to be fairly good. I also found that the teacher participants were, to an extent, able to accommodate these learners in incorporating the use of assistive technology and Braille in instruction and learning activities, more specifically in the case of teachers at special needs schools. This finding is once again underscored by the American Foundation for the Blind (2011) that also refers to the need for additional support by more strongly relying on the other senses, supported by assistive technologies and Braille.

Participants furthermore realised that in their interaction with learners with visual impairment, they required knowledge on referrals to specialists for diagnosis and treatment, thereby indicating awareness of their need to be familiar with referral pathways. This finding aligns with the American Optometric Association (2007) that emphasises that the diagnosis of visual impairment can only be done by healthcare practitioners, with schools taking care of education-related recommendations based on functional assessments. For learners in South African schools to be referred to any specialist, a SIAS process has to be completed at school, which implies that teachers need to be familiar with completing the SIAS process so that suitable assistance can be obtained. Examples of support for learners include medication, surgery or accommodation, to mention but a few, with the teacher forming part of the planning and implementation processes.

In addition, in the South African context, a shortage of specialists exists (Alswailmi, 2018). This is confirmed by my findings, pointing to a deficit in terms of specialists or special support services at all schools. This finding correlates with the work of Lewallen and Courtright (2001) who explain that the services of healthcare specialists in South Africa may not always be easily accessible due to most of them being privately based, or as a result of affordability or long distances required to travel to access such services.

As such, the findings of my study indicate that the participants were to an extent aware of what can be done to support learners with visual impairment at the time of my study, even though they indicated the need for additional knowledge and skills for implementation of suggested strategies. Participants, for example, emphasised such learners' need for Learning and Teaching Support Material (LTSM) and classroom

adaptation, yet did not refer to the importance of training for learners with visual impairment to use their remaining vision and other senses to interact with their environment, as emphasised by the WHO (1992). In addition, participants' apparent limited knowledge on inclusive education policy resulted in some of them indicating that inclusive education may not work in their school – both in full service and selected special needs schools.

Forlin (2010) states that inclusive education acknowledges and respects all learners' diversity, and can be successfully implemented in any school situation. This contradiction between my findings and existing literature may be ascribed to limited knowledge on the side of the participants due to a lack of sufficient training and support, as well as some participants not having experienced the phenomenon in their own contexts at the time. This finding is furthermore in contradiction with what is indicated in the report on progress in the schooling sector against key learner performance and attainment indicators (Department of Basic Education, 2016), which states that special needs schools can be regarded as resource centres for full service schools and ordinary schools. Being a resource centre in the South African context implies that material and human resources are available and accessible from the particular schools and that other schools are able to request assistance from the school. As such, my finding that some participants held the view that inclusive education cannot be implemented in special needs schools contradicts current policy. This finding on the view of the teachers requires further research.

However, teacher participants from full service schools reported that they were attending to their schools' infrastructures and as a result of their interaction with special needs schools' teachers and stakeholders, enhancing their schools' readiness to enrol more learners with special needs. Swart et al. (2004) conducted a similar study, yet found that South African schools are lagging behind in terms of inclusive instruction and learning due to limited resources. In addition to having suitable resources in schools, several scholars (Brown et al., 2013; Donohue & Bornman, 2014) emphasise the importance of teachers being trained on how to teach learners with special needs. In this regard, I found that teachers are often frustrated with the expected implementation of inclusive education policy due to the people meant to train, follow-up and monitor them also not knowing the policy in detail and not supporting them sufficiently. As such, the readiness of many full service schools to implement inclusive

education may require some more time. The difference between my findings and those of Swart et al. (2004) points to some improvement in schools required to implement inclusive education policy, probably due to the time lapse between the two studies and ongoing efforts in the country to encourage inclusivity in all schools.

6.2.2 Relying on PRA principles to access participants' knowledge and insight

According to Chilisa (2012), PRA can be regarded as a people-centred methodology, as it relies on interaction with people to gain access to their knowledge and expertise, as clearly demonstrated by the findings of my study. According to Chambers (2008), PRA thus allows researchers and participants to co-construct knowledge and provide input for the development of action plans. This is once again confirmed by the findings I obtained, as I was able to access the participants' knowledge and expertise, gaining insight into their ideas and input for the postgraduate programme that had to be developed. As such, as the participants made meaning of the topic under study against the background of their experiences, I could gain the necessary understanding to address the purpose of my study. In doing this, the participants relied on the PRA principle of joint knowledge construction as proposed by Baum et al. (2006) to share their knowledge and insight with the research team.

In this way, research team members were able to learn from the participants in relying on their insight on the topic being explored, while aiming to develop a programme that met the requirements of the South African Qualification Authority and other related bodies. My observation that the participants supported the development of the qualification implied that they were dedicated to inform its content and ultimately contribute to positive change in the field of visual impairment – once again in alignment with the outcome of PRA research (Chambers, 2008).

I furthermore found that by obtaining knowledge from the participants in a PRA-driven collaborative manner, they were provided with the necessary power to stay involved, steer discussions and provide their full participation. This finding supports the work of Chambers (2008) and of Aubele (2004) who explain the value of PRA in empowering participants based on their realisation that they can make a positive contribution due to their knowledge and expertise. I found that the participants indeed felt valued and heard, hence taking ownership of the research process in realising that their knowledge and expertise were acknowledged and taken into account. As a secondary

outcome, they reflected on their own needs and expertise, which once again allowed them to realise their competence, skills and ability to achieve.

This finding underscores the work of Molteberg (1995), which indicates that, when participants experience that their opinions matter, they are likely to contribute more actively to the research process and solving a problem (brainstorming the content of a qualification in this case), thereby taking ownership of the process. The finding similarly aligns with Chambers' (2008) statement that local people possess valuable knowledge and when this is recognised and they are invited to share their knowledge, they will freely share such knowledge and expertise. In my study, I found that the participants indeed shared their ideas in an open and motivated way, most probably due to the PRA-methodology and group discussions employed.

In accessing the participants' knowledge and expertise it was important for me to take on the role of facilitator and not impose my knowledge or experiences onto the participants, once again aligning my approach with basic PRA-principles (Chambers, 2008). In handing over the proverbial stick, participants could take the lead and, based on their knowledge and experience, contribute to the conceptualisation of the proposed qualification. In facilitating the PRA process, I immersed myself in the participants' contexts, confirming the work of Gibson (2002) who states that researchers need to immerse themselves in the culture and at times the language and context of the participants to gain insight into their knowledge, expertise and experiences. To this end, participants as a result usually engage freely as they realise that the researcher is willing to learn from them, according to Gibson (2002) and Mukherjee (1997). I found this to be the case in my study, where we treated the participants as experts and communicated to them that we wanted to learn from them, encouraging positive input and open contributions from their side.

As a result, I found that the participants informed the qualification and made a meaningful contribution to the study. This finding is in line with the stakeholder consultation approach to programme development (Thomas, 2016). Closely aligned, the finding confirms what Ofsted (2014) proposes in terms of the importance of consultation with and involvement of stakeholders in programme development, thereby allowing them to be partners and meaningfully collaborate with developers, in this case researchers that had the aim of developing a qualification.

In addition to my findings confirming the value of the stakeholder consultation approach to programme development, my findings highlight the value of including elements of the needs analysis approach when developing a programme (Thomas, 2016). A needs analysis is typically done to determine the relevant knowledge and skills required as outcome of a qualification. In concurrence with this approach, the research team consulted the participants in determining the needs they had experienced when working with and supporting learners with visual impairment through the implementation of inclusive education in the past as well as at the time of my field work. In line with my finding of the teacher participants understanding their own needs, Thomas (2016) states that a clear comprehension of the challenges experienced prior to developing a qualification can assist in stipulating what the specific purpose of a qualification should be.

Even though the knowledge and information that the participants shared during discussions did not always align with existing literature on inclusive education and visual impairment, the value of utilising the PRA approach in my study lay in the team being able to access the participants' knowledge and expertise, regardless of this being fully accurate or not. For example, I found that many of the participants displayed only partial insight in terms of the needs of learners with visual impairment, despite existing literature providing comprehensive information in this regard (Consult Chapter 2). This finding is closely aligned with Brydges and Mkandawire's (2016) view, indicating that participants in a study will share perceived experiences and views, for example on the needs of learners with visual impairment based on their exposure to these in the past. As the research team relied on such learners' teachers, based on the assumption that teachers may know and understand their needs, this finding adds insight into the possibility of relying on research partners to access knowledge and insight that may subsequently inform programme development.

In summary, the findings of my study confirm the value of PRA as a possible approach to follow when wanting to access the knowledge and expertise of participants, with the aim of informing programme development. More specifically, the PRA-principles of collaboration, sharing knowledge, handing over the stick and empowerment with the implied belief in own competence allowed me to access the views and ideas of the participants. In addition, my study foregrounds the value of observation-as-context-of-interaction when conducting PRA research, as my presence and involvement in

discussions while observing the participants in their contexts against the background of the topics of discussion proved to be a valuable data generation strategy.

6.3 VALUE OF PARTICIPANTS BEING REGARDED AS RESEARCH PARTNERS

PRA is known to enhance the establishment of research partnerships with participants as well as continued collaboration (Chambers, 2008). This study was characterised by collaboration among researchers, teachers and expert stakeholders in the field of visual impairment with the joint goal of conceptualising and identifying possible learning content for a postgraduate qualification in this area. During collaboration as part of data generation sessions, the research team learnt from the participants, and they (participants) learnt from one another. This confirms that partnerships that were formed benefited all involved, thereby supporting the work of Chambers (2012) who views relationships and partnerships in PRA as vital to achieve a common goal.

Closely related, I found that the participants valued the relationships and collaboration with peers as it assisted them to reach a common goal (formulated by the research team), yet also to acquire new knowledge and skills that they could implement in their schools in support of positive change. This finding aligns with existing literature that regards participant interaction as empowering, with the possibility of facilitating partnerships (Aubel, 2004; Cheatham-Rojas & Shen, 2008). As the participants in this study come from different contexts and systems where they may function in different ways than their fellow participants, the interactions that took place during data generation sessions resulted in the exchange of ideas and knowledge with potential application value.

In accordance with the findings of my study, Makoelle (2014) states that when a culture of sharing is evident between participants and researchers, mutual learning will occur. Throughout, participants shared their experiences and ideas during PRA activities as well as in informal conversations. This finding supports Makoelle's (2014) view that the sharing of ideas and mutual learning is not restricted to formal discussions or data generation activities but can occur in any context, particularly when rapport has been established between the participants themselves and between them and research team members. Such a culture of sharing typically encourages participants to fulfil the expected role of being co-constructors of knowledge, which is what took place in this

study when teachers and stakeholders in collaboration with the research team co-constructed ideas for the proposed qualification.

In the current study, teacher-participants were thus found to understand and value the importance of forming partnerships with one another and with other stakeholders who took part in the study, yet also functioning outside this context, such as departmental officials and specialised professionals. This view is seldom realised in practice as specialists are seldom available in full service schools. In addition, long waiting lists often exist at special needs schools, with learners as a result being enrolled in full service schools where teachers are not necessarily sufficiently capacitated to work with learners with special needs such as visual impairment (Brown et al., 2013). In addition to the role of teachers, inclusive education policy advocates a team effort and participation of various stakeholders in any learner's life, including the learner's parents who may assist with some of the instruction and learning activities (Department of Basic Education, 2001; UNESCO, 1994) when accommodating these learners in inclusive classrooms. These groups form part of the systems that learners function in, with the possibility of a challenge not necessarily lying with the learner but in the various systems that may need to be adapted to be inclusive. As such, the value of collaboration between different systems implies the potential of growth and learning taking place in both formal and informal contexts in support of the learner who is involved (Department of Basic Education, 2011).

Given the above-mentioned findings, the link between the implementation of inclusive education policy and some principles of PRA is clear. Inclusive education policy cannot be implemented in isolation, as the various stakeholders in a learner's life are required to be involved as equal partners (Soodak, 2004). In the same manner, collaboration with parents and stakeholders for the benefit of a learner is a basic principle of PRA in support of these stakeholders (research partners) forming a community of support with a common goal in mind (Soodak, 2004). At its core, the sharing of information is important for stakeholders to formulate joint action plans and promote positive change (UNESCO, 1994).

The finding that the participants in the current study benefited from their participation and could initiate positive change is furthermore aligned with the PRA principle of participants gaining the necessary power to solve problems and improve their own

situations (Chambers, 1999; Fals-Borda, 1991). This finding supports Fals-Borda's (1991) conceptualisation of PRA, which indicates that participants need to become research partners to change their situation for the better. Closely aligned, my finding that the participants felt included and as if they had a voice and were heard, confirms the work of Chambers (2008), stating that PRA can provide marginalised groups of people with an opportunity to voice their challenges and seek suitable solutions to problems. In support of this view, I found that the participants valued the experience of their views and ideas being taken into consideration. In being heard, they were able to reach the common goal of conceptualising the proposed qualification and improve their teaching of learners with visual impairment. These findings once again confirm the value of PRA as process that may be used to formulate action plans for positive change (Chambers, 2008), for example, when working on a qualification in a scarce field of expertise.

I also found that the participants actively participated due to their experience of an equal and fair distribution of power that existed, and that inequity was intended to be eliminated. This finding correlates with Watters et al.'s (2010) view in stating that, when the distribution of power for all those involved in a research process is fair, increased motivation to become partners and collaborate can be expected. As such, participants in the current study were found to be encouraged to form partnerships and become equal partners in a community of support with the aim of supporting positive change in the lives of learners with visual impairment.

Through partnership establishment participants in my study were thus able to work together as a group of people coming from different contexts and angles of visual impairment, with the ultimate aim of contributing to positive future change. This finding is aligned with the work of Watters et al. (2010) who state that participants in PRA-studies are always regarded as research partners who possess knowledge that, during participation, will typically raise the awareness of their own strengths. As stated, I namely found that the participants, as research partners, shared the aim of benefiting the broader visual impairment community, eventually becoming a community of support. This finding is slightly different from yet also builds on existing literature indicating that participants are likely to give their time and effort when a study will benefit them directly (Bailey, 2009). More specifically, in the case of my study, participants thought beyond themselves and aimed to contribute to the wellbeing of

learners with visual impairment, as well as current and prospective teachers, in a way that may allow learners' and teachers' voices to be heard through the participants as research partners or research instruments (Ghayea et al., 2008).

According to Chambers and Guijt (1995), such sharing of information and ideas can be encouraged through audio-visual presentations to accommodate and hear all participants, especially those who may be illiterate and/or unable to read formal text presentations. This recommendation could be implemented in my study as participants were able to engage with one another in compiling PRA-matrices, whether they could see what was written or not, specifically in the case of the two expert stakeholders' colloquiums.

In this manner, by relying on PRA, I was able to involve different groups of participants (teachers from full service schools and special needs schools, as well as expert stakeholders in the field of visual impairment) for a common purpose to yield rich results. This finding on the possibility and value of involving diverse groups of participants in one study adds new insight to PRA methodology, as it demonstrates how different groups of people can engage and form partnerships when striving to reach a common goal. Participants furthermore appreciated the fact that their knowledge, efforts and experiences were being recognised by both researchers and other participants, resulting in their continued commitment to contribute to the conceptualisation of the qualification. In a way, participants seemingly felt as if they were paving the way for prospective teachers in the field of visual impairment and were advocating for learners who did not often get the opportunity to speak for themselves.

Through the utilisation of PRA, the participants thus formed part of a community of support for one another as well as indirectly for other teachers as well as learners with visual impairment. This finding adds insight to the existing knowledge base on PRA as it points to the value of PRA to bring people together that can support one another while facilitating change in their own separate contexts (Levine & Marcus, 2010). The partnerships that were formed during this study enabled the teacher participants to go back to their respective workplaces and effect some changes due to their having acquired ideas from their partners. As an outcome, positive change could be facilitated in the field of the visual impairment community (Consult the work of Molteberg, 1995).

The findings of my study furthermore add to the PRA knowledge base that participants can be enabled to manage relationships, which is an essential ability gained while engaging in mutual learning (Thabe, 2015). As participants worked together, they gained confidence in themselves and their abilities, and were as a result able to establish sound working partnerships. Their self-esteem in terms of working with learners with visual impairment in the inclusive setting also improved, thereby contributing to their enablement based on collaboration and relationships with others working in similar contexts.

In summary, the findings of my study confirm the possibility of researchers utilising PRA to collaborate with teachers and stakeholders, forming partnerships with them that may result in positive change in the visual impairment community. More specifically, my findings emphasise the value of PRA to establish meaningful partnerships and promote collaboration to reach a common goal. Processes and change initiations can in turn be streamlined and improved through the involvement and consultation with relevant stakeholders. PRA is also valuable when specific (often vulnerable) groups need to be provided with an opportunity to voice their ideas and act as representatives of the larger community they belong to. Finally, PRA can be regarded as a drive for participants to learn with and from one another, share ideas and expertise, and become a community of support to one another.

6.4 VALUE OF PRA FOR THE PROFESSIONAL AND PERSONAL DEVELOPMENT OF PARTICIPANTS

In my study, I found that the relationships and partnerships that were formed between the participants and the researchers as well as fellow participants contributed to growth and development on both professional and personal level. Participants became aware that the development of the proposed qualification partially relied on their expertise and willingness to establish partnerships and to contribute in support of the visual impairment community.

6.4.1 Value for professional development

In terms of the professional development of the teacher participants, I found that their capacity was strengthened through newly gained knowledge and skills as a result of their participation in my study. The development of new knowledge and acquisition of

skills took place through engagement with other participants, thereby emphasising the value of mutual learning. In working together to come up with ideas and solutions in supporting learners with visual impairment, the participants became aware of their own competence and expertise, and developed confidence in their own knowledge as well as that of their counterparts.

Participants as a result took ownership of the research process and were committed to making a contribution as they noticed that learning was reciprocated in the study. In addition, they applied their newly gained knowledge and skills in their working environments in support of their teaching practice. This finding correlates with a study by Ebersöhn, Ferreira and Beukes (2012) that emphasises the importance of collaborative partnerships between education researchers and teachers so that teachers are able to take ownership of such a process of change, form knowledge networks and improve on their practice. As such, the participants in my study did not only commit to contributing to the development of a qualification but also to support learners with visual impairment more effectively at the schools where they were employed.

These findings emphasise the fact that the participants became aware of their own professional competence and their schools' potential to accommodate learners with disabilities during the discussions they partook in. The findings align with an acknowledged advantage of PRA, namely that involvement in a PRA-process can assist participants to become aware of their available resources and capabilities (Pain & Francis, 2003; Maree, 2007). As a result, participants will typically be able to recognise and capitalise on their own resources to improve their practice and solve problems they experience. This finding on instilling skills in participants to identify and use their available resources and contribute to positive change correlates with the work of Ozanne and Saatcioglu (2008), emphasising how existing resources can be helpful in resolving participants' challenges. Moreover, participants in the current study became aware of the fact that they were resources in themselves and that they could rely on one another for future support.

In terms of their work-related responsibilities, participants in my study became equally aware of the importance of implementing inclusive education policy, the value of a changed attitude towards inclusive education by teachers and the benefits of acquiring

the necessary resources (and knowing how to use these) for teachers to better support learners with visual impairment in the classroom. In addition, the participants realised the importance of understanding disability and becoming change agents in supporting learners with disabilities in all schools. In this process of becoming aware of their own role and learning from others, participants gained practical skills that they could apply in their classrooms in support of learners with visual impairment, including that of referring learners who require this, and involving parents more actively in supporting learners. In this way, my study adds some insight in terms of teachers or potentially other professionals realising what is important and what is less important in their work environment, as a result of participation in a PRA-process, leading to their being able to prioritise future actions and initiatives (Oakley, 2001).

Closely related, participation in the PRA process also resulted in the participants realising the importance of training and ongoing support with regard to the implementation of inclusive education in the context of visual impairment. As such, participation in this PRA study facilitated participants' awareness of their own competence and that they possessed the answer to many problems and could make valuable contributions as discussed in the previous paragraph, yet also enhanced their awareness of areas where they could gain more knowledge and skills. My study thus adds some new insight to existing theory on PRA research, as such awareness may support participants to be cognisant of their own shortcomings and eventually result in their seeking assistance to gain further knowledge and skills. This finding builds on the work of Freire (1972), indicating that as people become aware of what lies within them, they will bring that to life and use it for their advantage while focusing on the ongoing process of learning and discovering new things.

In this regard, I found that the participants indicated the need to be better informed and understand inclusive education policy and its proposed implementation. They specifically referred to the importance of ongoing training and support in this area. This finding is confirmed by the fact that several legislative guidelines need to be in place, understood and implemented by teachers on ground level for inclusive education to provide maximum support to learners with special needs (Department of Education, 2007). As such, my study provides supportive evidence that participation in a PRA-process can result in participants focusing and valuing the development of their own

knowledge and skills base, and realising the importance of training, if needed, to reach their goal.

In summary, in terms of professional development, I found that the participants in my study became aware of what they were capable of and which areas required further development as a result of their development as research partners. Beyond the knowledge and skills that they could apply in the classroom, I found that the participants' facilitation skills could improve when involved in research of this nature. As PRA requires collaboration and in this study of the participants to do presentations to the broader group of participants, some of them acquired the skills of working in a team and facilitating discussions, as well as the necessary confidence to present their ideas to others. This finding is confirmed by Herr and Anderson (2005) who state that various skills can be developed by participants when involved in PRA activities, including the skills of team work and facilitation.

6.4.2 Value for personal development

Through their involvement in the PRA process, the participants seemingly became change agents as they started facilitating positive change in their respective contexts. Although their primary mandate to inform the conceptualisation of a qualification, they shared valuable insight among themselves that assisted them in their individual work contexts and empowered them to make a difference in the lives of learners in their schools. More specifically, I found that the participants started supporting learners by implementing the strategies that were voiced by others during the PRA discussions, thereby becoming positive change agents, as also referred to by James (2007). Kapoor and Jordan (2009) support this finding by indicating that PRA will encourage participants to change their circumstances when needed. In this manner, the objective of PRA to facilitate positive change (Baum et al., 2006), is thus demonstrated by this finding I obtained.

Closely related, I furthermore found that the participants were empowered in the process, not only to support learners with visual impairment but to improve their own knowledge and skills for the sake of personal growth. This finding is confirmed by Ozanne and Saatcioglu (2008) who state that PRA typically empowers and capacitates participants to discover their own strengths to make positive contributions in their contexts. My finding that the participants wanted to explore and pursue further

training therefore demonstrates that participants were prepared to change positively as teachers in fulfilling this role.

Due to the shortage of special needs schools in South Africa, some learners with visual impairment find themselves in school contexts where teachers may not have been sufficiently trained to work with them. To this end, I found that the participating teachers realised the importance of their being sufficiently trained and competent. They reflected on their own knowledge and expertise, and realised that they could benefit from further training for the sake of their own personal development and the contribution they could make in supporting learners with visual impairment. By realising that they could improve their skills related to, for example, classroom management, disciplinary measures and teaching strategies, participants could attend to their own development and attempt to reach their potential as supportive teachers. This finding elaborates on the work done by Ebersöhn et al. (2012) which states that, in a partnership, knowledge is shared that may be useful to one partner or the other, thereby ensuring that partners develop and grow both personally and/or professionally.

This finding confirms the importance of the PRA-principle of reflection, as the participants in my study reflected on the areas that require intervention, realising that they required assistance to function more effectively and promote social change. The finding aligns with the work of Aibel (2004) who notes that during participation, research partners ought to notice what is significant and what they possess to improve their own situations. In this regard, participants in my study reflected on the fact that most of the skills they had acquired were through experience (as a formal qualification in visual impairment studies did not yet exist), yet they also acknowledged that formal training could be beneficial to acquire the relevant knowledge and skills, in turn contributing to their personal development.

It follows that the participants' realisation that they required and also developed some skills through participation in this study resulted in their believing that they were fairly ready to implement inclusive education policy in class. In applying what they had learnt from fellow participants, they gained confidence in their own abilities and started focusing on inclusive education implementation more actively. As such, the findings of this study provides one possible way of empowering teachers to implement inclusive

education policy, against the background of training apparently not being offered in all provinces (Eloff & Kgwete, 2007). In this way, my study adds new insight into addressing the need for training of all teachers through *inter alia* collaboration and discussions with peers.

In summary, in following a PRA approach with the aim of conceptualising a postgraduate qualification, participants were able to grow and develop on both personal and professional level. Participants became more aware of their own existing competence and of their work-related responsibilities during discussions with peers as part of the PRA-activities. Participants also realised that their existing knowledge and skills could be built upon in support of the implementation of inclusive education when working with learners with visual impairment. As such, in addition to reaching the goal of conceptualising a qualification, the participants benefited personally and professionally as a result of the underlying principles of the PRA approach that was utilised, with the implied added benefit of positive change in the field of education for learners with visual impairment.

6.5 APPLYING PRA FOR PROGRAMME DEVELOPMENT

The participants made a few recommendations for consideration when utilising PRA for programme development in future, although these were limited. The most significant finding in this regard relates to the participants' special needs that could have been better accommodated by the research team. More specifically, participants indicated that additional resources could have assisted with their participation, such as Braille or electronic hand-outs prior to discussions. This finding is confirmed by Grenier (1998) who notes that the presentation of ideas during group discussions needs to be presented in forms that accommodate all involved in a research process. However, despite these apparent restrictions, participants contributed without reservation, most probably due to their feeling valued and in the position of making a positive contribution to the community that they formed part of.

This finding indicates that participation in studies may be enhanced if the needs of participants are met. This in turn emphasises the importance of a researcher knowing and understanding the participants and the context they come from prior to planning PRA-activities. The finding confirms the work of Kane et al. (1998) who states that participants' realities need to be presented as they are, therefore, that ignorance of

any special needs may lead to withdrawal and/or misrepresentation of participants' experiences. The finding furthermore implies that PRA researchers may benefit from some training when involving participants with special needs, in preparation of a study.

The finding also relates to the work of Aubel (2004) who states that, when participants feel that they are heard in terms of what they require, they will be more willing to take part in a research process. Chilisa (2012) elaborates by stating that in the case of participants coming from somewhat disadvantaged groups, it is important for a researcher to support them to be able to cooperate and participate in an optimal manner. Even though I found that the participants in the current study contributed with dedication and enthusiasm, as discussed in the previous section, the need for greater awareness in researchers for special needs is valid and makes a contribution to research in the field of PRA methodology. My finding that the participants thus participated in a dedicated and open manner despite their experience of their special needs not being met may possibly be ascribed to the fact that some of them may be regarded as marginalised people (the visually impaired). This hypothesis requires further research before drawing final conclusions.

Next, I found that, even though the sample size was not as large as expected by some of the participants and time was indicated as being too limited, the level of engagement between the researchers and participants and also among the participants themselves was observed to be satisfactory. Confirmation of this finding is provided by Pain and Francis (2003), who state that PRA values interaction and engagement, and is not a passive method of research but one that requires of participants to be actively involved. It is possible that the participants in my study valued the fact that they could contribute to such an extent that they requested ongoing involvement and sessions for collaboration, even after data generation had been completed.

In view of this, I also found that the interaction between teachers improved at some of the schools, as a result of their participation in this study. This finding that the selected methodological approach allowed participants to interact and share ideas on different platforms is supported by the work of Lunch and Lunch (2006) who maintain that, when discussions and methods are dynamic, the likelihood of participants being dedicated to contribute is strong. Improved interaction was furthermore evident between some teachers and learners with visual impairment, as teachers learnt from their fellow

participants during discussions, and saw it fit to start applying newly gained knowledge and skills, in turn supporting their interaction with learners.

Despite their experience of their special needs not being optimally considered, the participants were treated with consideration and respect throughout the study, in accordance with the work of Chambers and Guijt (1995) for active participation to be maximised. Respecting participants involved that their contributions were trusted and making a positive contribution to understanding the topic under investigation (Chambers & Guijt, 1995). The research team treated the participants as experts from the start, valuing their contributions and respecting their ideas. As a result, all participants were able to express themselves freely and interact with their colleagues in lively discussions, which was confirmed by the participants as valuable for any future research projects utilising such an approach.

In terms of the participants' recommendation to involve more stakeholders in future studies of a similar nature, Egerton University (2000) regards a limited number of participants as sufficient as long as a set goal is accomplished and the research questions are addressed. My observations of the participants' active contributions and the fact that the planned outcomes were reached correlate with this view. As such, the participants' view that additional participants could have been included does not support existing literature, nor the research team's observations. This may be ascribed to the possibility that the participants appreciated being heard and wished to include more of their peers in such a process. The reasons behind participants recommending the inclusion of other groups of participants such as departmental officials is understandable, as inclusion of such officials might have benefited them, in addition to perhaps adding to the knowledge that was generated. During individual interviews with some of these officials it became clear that many of them did not fully understand inclusive education policy implementation, making it hard for them to train and support teachers in this area. More research is required before confirming such a hypothesis.

One of the disadvantages often associated with PRA relates to the fact that it can be time-consuming (Egerton University, 2000). In contradiction of existing literature, the participants in the current study indicated that the time was too limited and that additional and longer sessions could have been included. Some participants indicated the need for more time to share their ideas and listen to their peers' views. A possible

reason for this contradiction between existing studies and the findings of my study may be that some of the afternoon sessions at schools had to be adjusted and shortened due to the availability and responsibilities of teachers at these schools. In the case of the stakeholders, they might have appreciated the fact that they were involved in conceptualising a qualification that could benefit people working in their field of interest to such an extent that they wanted to engage in ongoing discussions. These possibilities require further research before coming to final conclusions.

In summary, as with any other research approach, PRA implies some challenges and limitations in terms of its implementation. In this study, the participants referred to only a few of these, namely that the research team did not invite enough participants and did not allow enough time for the study. In addition, participants recommended better accommodation of participants' special needs in future studies. Despite these (limited) recommendations, the PRA process that was followed to conceptualise a qualification proved to be valuable and resulted in the successful achievement of this aim.

6.6 SILENCES IN THE DATA

When comparing the data I obtained to existing knowledge, certain silences could be identified. In the 18 years since White Paper 6 on inclusive education (Department of Basic Education, 2001) was released, the progress of implementation in South African schools is still not clear. Some schools have been equipped with physical resources that may benefit learners with disabilities (Department of Basic Education, 2001), and in-service training of teachers has reportedly been undertaken by officials from the Department of Education. According to Malak (2013), some teachers may thus have received an overview of inclusive education implementation based on such training.

Despite alleged resource provision and training by the Department of Education, the participants in the current study did not emphasise this. They indicated the need to be trained and for specialised resources to be provided to their schools. This apparent silence in the data may be due to some participants' limited understanding of inclusive education policy and the use of resources to teach and support learners with disabilities, especially learners with visual impairment. Furthermore, the training they were supposed to have received might not have been comprehensive enough for them to feel confident to implement the policy. In addition, teachers may not know how to facilitate in-service training themselves or professionally support the development of

teachers of learners with visual impairment. As many teachers emphasised the lack of support for the implementation of inclusive education policy, both in the form of follow-up training as well as supportive resources, the Department of Education may have to reconsider the methods that have been implemented up to now. These are, however, mere hypotheses, which require further exploration before drawing conclusions.

Next, mentor teaching is indicated in existing literature as being beneficial to young teachers, for example those who are uncertain regarding the implementation of inclusive education or how to accommodate learners with visual impairment in their classes (Malak, 2013; Khoaeane, 2012). If mentored by experienced teachers, young teachers may find the implementation process to be easier and become more confident to take on this responsibility. However, the participants in this study did not mention mentorship and/or in-service training of teachers as needs, resources or services required for the implementation of inclusive education policy. This silence may be ascribed to such training or mentoring already taking place at different schools without the participants realising that they were informally supported by others, or to teachers not feeling confident enough to mentor others to teach learners with visual impairment. Nonetheless, these possibilities are once again mere hypotheses that require further investigation before drawing conclusions.

Another important aspect of supporting learners with special needs in schools in South Africa involves the work of School Based Support Teams (SBSTs), which was not mentioned by the participants in this study. Participants merely referred to their individual efforts of supporting learners with visual impairment and not the collective efforts they engaged in with their colleagues. As such, participants did not discuss the significance of a functional SBST to ensure that learners are adequately supported in the school context prior to being referred for external support (Department of Basic Education, 2001). This leads to the next silence in the data, as participants similarly did not discuss the functionality of District Based Support Teams (DBSTs), which also form part of the inclusion of learners with disabilities in all schools (Department of Basic Education, 2001). Instead of focusing on the potential support provided by SBSTs and DBSTs, the participants merely referred to not receiving sufficient support from district-based officials. This focus on a lack of sufficient support can possibly be

understood against the background that district officials in South Africa are often responsible for numerous schools, making it hard for them to attend to the needs of all teachers.

Regarding the participants' understanding of learners with visual impairment, participants who took part in the interviews indicated that visual impairment entails a loss of or limited vision that prevents a learner from adequately participating in educational or day-to-day activities. This represents a rather limited understanding as Keeffe (1996) describes visual impairment as an umbrella term for a decrease and/or absence of a person's vision. Even though visual impairment can often be corrected through medication or other means, especially when identified early (WHO, 1992; American Foundation for the Blind, 2011), the participants did not refer to the identification of or interventions for learners with visual impairment. This indicates that most participants probably require further training on the definition of visual impairment, its causes, symptoms, prevention and intervention strategies. Furthermore, teachers seemingly require more information on the SIAS process for learners with visual impairment and how to establish referral pathways that may benefit these learners, as they did not indicate an understanding of identifying learners with visual impairment or of typical symptoms that may provide such indication in class.

When asked about the needs of learners with visual impairment, participants did not mention the need for these learners to develop a positive self-concept, which may hinder learners' scholastic performance and social interactions (Beaty, 1991; Datta & Talukdar, 2016). Participants' silence in terms of these important needs of learners with visual impairment may perhaps be related to their merely focusing on the accommodation of such learners in class, without thinking of the long-term implication of not developing a positive self-concept or being stigmatised. In addition, participants did not mention the need for knowing how to deal with stigma and stereotyping of learners with visual impairment, which is typically experienced by these learners (Brydges & Mkandawire, 2016). These findings highlight the importance of teachers being knowledgeable about the Expanded core curriculum (Hattlen, 1996) when working with learners with visual impairment.

Concerning the support of learners with visual impairment, participants did not mention the importance of support by other people, such as their sighted peers that, for example, can assist when learners with visual impairment are climbing staircases, packing their schoolbags or finding their way around the school grounds, as suggested by Verdier (2016). Similarly, participants did not mention strategies related to vitamin deficiencies or fatigue that may be employed in supporting learners experiencing visual impairment due to insufficient vitamins and/or fatigue. These silences could be because participants had not yet found themselves in situations that required of them to intervene with learners on these levels. Participants may furthermore not have mentioned the necessity of peer support due to the teachers not being informed of the principles underlying orientation and mobility or the peer assistance system, despite some of the participants referring to the importance of orientation and mobility training. These hypotheses require further research.

Closely related, participants did not mention the need to prepare learners with visual impairment for processes of transition. Such transition can take the form of these learners being introduced to the use of Braille and other devices when their vision is deteriorating (Calonge, 2004), or of being prepared to function independently, as learners with visual impairment may eventually have to enter tertiary institutions and the world of work, which will require of them to rely on themselves for the fulfilment of their own needs and at times their privacy (Resnikoff et al., 2008). Once again, this silence may perhaps be ascribed to the participants merely focusing on the accommodation of these learners in the classrooms without considering any broader implications.

Despite several multiple disabilities potentially co-occurring with visual impairment, the participants in my study referred only to deafness. According to Mosca (2015), common challenges that affect learners with visual impairment include communication, and poor memory and attention span; the participants did not mention these. Additionally, these learners are said typically to struggle with social withdrawal (Landsberg et al., 2005), which was not found in the current study. These elucidations once again emphasise the reason for teacher participants often referring to the need for training in, for example, communication and discipline strategies that may assist them when teaching learners with visual impairment.

I also identified some silences in terms of the methodological approach I followed. More specifically, existing literature indicates the unpredictability of PRA, implied irregularities and the risk of inconsistent participation as potential challenges of this approach (Pain & Francis, 2003; Chambers, 2008). I did not experience these challenges; neither did the participants identify them as areas of growth. This silence in terms of challenges associated with PRA research may be ascribed to participants noticing that they were valued and that their expertise was taken into consideration, resulting in their dedicated participation in a study that had the potential of benefiting both the participants and the communities they formed part of.

Finally, when reflecting on the PRA-process followed for conceptualising and eventually developing a postgraduate qualification in visual impairment studies, no participant referred to traditional approaches to programme development (Leuders, 2016; Misko, 2015). This silence may indicate the participants' experience of the process followed in my study as being suitable and valuable, which can be linked to the finding that they appreciated a process in which they could contribute.

6.7 CONCLUSION

In this chapter, I discussed the findings of the study by situating the results I obtained against the background of the existing literature I discussed in Chapters 2 and 3. I presented the findings by referring to correlations, contradictions, new insight I obtained and silences I identified in the data analysis.

In the following and final chapter of the thesis, I draw conclusions by revisiting my research questions. I also discuss the potential contributions of the study and identify some challenges I experienced. Finally, I make recommendations for training, practice and future research.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

In the previous chapter I discussed the findings of the study by integrating the results I obtained with existing literature. I highlighted correlations and contradictions, and identified new insight based on this study. I also elaborated on silences I identified in the literature.

In this chapter, I first provide an overview of the preceding chapters. I then draw conclusions by revisiting the research questions I formulated in Chapter 1. I reflect on the potential contribution of the study and identify the challenges I encountered as well as the limitations of the study. Finally, I formulate recommendations for training, practice and future research.

7.2 OVERVIEW OF THE PREVIOUS CHAPTERS

Chapter 1 provided an introduction and broad overview of the study. I explained the rationale for exploring the specific phenomenon, formulated research questions, stated the purpose of the research and clarified key concepts. Next, I introduced the selected paradigms, research design and methodological choices. I also stipulated my working assumptions, and referred to the ethical considerations and quality criteria I applied in undertaking this study.

In **Chapter 2** I explored literature related to the focus of my study. I specifically discussed existing literature in the fields of visual impairment and inclusive education. In terms of visual impairment, I explored the meaning, types, causes and prevalence of visual impairment, the general needs of learners with visual impairment as well as the training that teachers may require when working with learners with visual impairment, more specifically in the South African context. In the second part of the chapter, I elaborated on the underlying principles of inclusive education, its benefits as well as the progress of policy implementation in South Africa against the background of international trends. I discussed inclusive education in conjunction with

children's rights and the bill of rights for all children with visual impairment and their families. I concluded the chapter by explaining my conceptual framework.

In **Chapter 3** I discussed PRA in terms of its meaning, development and use. I described the underlying principles of PRA, as well as advantages and associated challenges when conducting PRA research. Next, I elaborated on approaches to programme development and discussed the possibility of following a PRA approach to develop a qualification. This discussion was done against the background of the purpose of the broader project that my study forms part of, being the development of a postgraduate qualification in visual impairment studies.

In **Chapter 4** I provided a detailed description of the empirical study I conducted. I explained the paradigmatic choices, selected research design and methodological strategies I relied on for data generation, documentation and analysis. Throughout, I explained the reasons for these choices and reflected on associated benefits and potential limitations. I concluded the chapter by discussing my role as researcher as well as the ethical considerations and quality criteria I adhered to in my study.

In **Chapter 5** I presented the results of the study in terms of the four themes and related sub-themes I identified following the thematic inductive data analysis I completed. I enriched my discussion of the results by including verbatim and visual examples from the raw data. Next, in **Chapter 6**, I situate the results I obtained against the background of existing literature. To this end, I highlight similarities, contradictions, new insight and silences.

7.3 CONCLUSIONS

In this section, I draw conclusions in terms of the secondary research questions that guided me in undertaking this study. I attend to the primary research question in the next section where I highlight the contribution of the study.

7.3.1 Secondary research question 1: What are the needs of learners with visual impairment as perceived by their teachers and other people working with them?

As background to developing a qualification for teachers that are required to implement inclusive education in the South African context, the needs of learners receiving the education had to be considered. As such, my research as part of the

broader project included a component on exploring the needs of learners with visual impairment. Findings indicate that participants viewed learners' needs as broader than what is apparent on face value. Beyond their apparent educational needs and school-based challenges experienced, learners with visual impairment have psychosocial needs and require both physical and human resources to support them. When providing for these needs the possibility of learners reaching their potential and succeeding in school can be enhanced.

In terms of the school context, learners with visual impairment generally experience orientation and mobility needs. They thus need to be orientated in the school and classroom, specifically when new to a school or moving on to a new grade. In some schools, such as some full service schools where learners rotate classrooms, this may cause confusion for learners who are not well orientated on the school premises. As learners grow older, they need to become independent and know, for example, their way to common spaces such as bathrooms and dining areas, and gradually learn how to, for example, clean, cook and attend to self-care. If not orientated, this can create yet another challenge for learners with visual impairment in the school context. Therefore, orientation and mobility are a central need of learners with visual impairment, which has to be fulfilled and attended to by specialists in orientation and mobility training, supported by the teachers who work with the learners.

Learners with visual impairment furthermore require specialised physical resources to function optimally in the school context. These learners need relevant Learning and Teaching Support Material, assistive devices and specialised equipment. Braille machines and printers, Braille textbooks and question papers, walking sticks and magnifying glasses are some of the physical resources identified in this study. However, most schools in South Africa do not yet possess such resources that may benefit learners with visual impairment. In terms of the school environment, learners also require the necessary resources and support in the form of, for example, school grounds that are preferably flat, sufficient space to move around in classrooms and on the school grounds, and signage posts painted in visible colours (for example in yellow, for the partially sighted to be able to see them more clearly). As such, the physical environment of both the school and the classroom need to support the way in which orientation and mobility needs can be met.

Learners with visual impairment furthermore have the right to quality education, just like all other learners. As such, qualified and well equipped teachers and school staff members, which may include Braille instructors as well as orientation and mobility specialists are important. To this end, teachers of learners with visual impairment need to possess and practise the relevant teaching and support strategies. Teachers of learners with visual impairment require additional training to be equipped with the necessary knowledge and skills to implement inclusive education in their teaching and support of these learners. In addition, other people in the school environment, such as administrators, guards and hostel parents, to mention but a few, need to know how to work with and support learners with visual impairment. Besides these human resource-related need of learners with visual impairment, they require parent involvement and support at home. Some parents may not be optimally involved in the education of their children, often due to not knowing how to support their children, despite the desire to do so. In this regard I posit that parents of learners with visual impairment may also benefit from some sort of training or guidance that can equip them to support their children appropriately.

Regarding their psychosocial needs, the current study emphasises the need of learners with visual impairment to be accepted by other people. More specifically, these learners want to fit in and feel safe in the groups they form part of and at the platforms that they function on. They furthermore require guidance on initiating and maintaining friendships without being judged and stigmatised. These learners need to accept themselves and their impairment, relying on support or professional counselling to be able to do so, if required.

Finally, and probably most important against the current system of inclusion in education, learners with visual impairment have the right to equal access to supportive resources as well as quality education. Learners thus need to be included in classrooms and schools of their choice, being accommodated and taught in a way that can support their learning. Throughout, these learners should be respected and treated fairly, and not be discriminated against. Additionally, correct referral procedures that may promote learners' wellbeing as they obtain the relevant help from different specialist professionals need to be implemented by schools.

7.3.2 Secondary research question 2: What are the needs, expectations and existing expertise of teachers in implementing inclusive education policy in support of learners with visual impairment?

Teachers in both full service and special needs schools that participated in my study indicated specific needs that had reportedly not been met and might have hindered them from effectively implementing inclusive education when teaching learners with visual impairment. One of the main concerns highlighted by the current study relates to the training of teachers in the implementation of an inclusive education policy, which seems to be intended yet has not been actualised yet. Most teachers reported that they had not been trained on White Paper 6 (Department of Basic Education, 2001) or how to implement the policy in their classrooms and schools. Most of them referred to being trained according to the SIAS policy, curriculum differentiation and guidelines for full service schools in accommodating learners but not specifically in the implementation of inclusive education policy. Although teachers had received some training in terms of these aspects, they noted that they had not yet mastered the implementation of these aspects. This finding points to the difficulty currently experienced by teachers to include learners with special needs. Despite being trained, teachers indicated that they still found it challenging to identify, support and refer learners for specialist support, let alone accommodating the learners in every classroom as required by policy.

In addition to the need for training on inclusive education, teachers indicated the need to understand visual impairment in terms its causes, symptoms, treatment, implications and referral pathways to be able to relate effectively to learners with visual impairment. Moreover, teachers in this study indicated the need to know how to manage and discipline learners with visual impairment, how to communicate with them, teach them socially acceptable norms and how to guide other learners also to fulfil a supportive role.

Teachers, particularly from full service schools, furthermore referred to relevant teaching and assessment strategies and techniques that can be employed when working with learners with visual impairment, once again highlighting their uncertainty in this field. As no formal qualification is currently being offered in the field of visual impairment in the country, teachers who participated did not possess any relevant

qualification that could have taught them how to work with learners with visual impairment, which explains their uncertainty and need for training. Even though some teachers had obtained qualifications in inclusive education and special needs education, which may have provided them with an overview of inclusive education and visual impairment (disability), they perceived these qualifications as not sufficient in preparing them to support learners with visual impairment optimally.

Teachers in this study specifically foregrounded the need for sufficient support from departmental officials. In the current dispensation, the closest officials that can provide support to teachers in South African schools are those that are district-based, working in a specific section, called an *inclusive education section*. Such sections consist of a chief, deputy chief and senior education specialists that are supposed to assist in schools with initial training and follow-up support to teachers in inclusive education policy implementation. Despite this proposed structure, teachers indicated that they had not been supported efficiently, and mentioned the need to be guided, monitored and subsequently supported in the implementation of the said policy.

In addition to training and support by government officials, teachers in this study indicated the need for sufficient Learning and Teaching Support Material and resources that could support them when working with learners with visual impairment. However, a shortage of resources is evident in both special needs schools and full service schools in South Africa, with the latter generally not being equipped to implement inclusive education policy. Teachers may, as a result, struggle to engage with learners due to not having the relevant Learning and Teaching Support Material. Furthermore, even though resources are reportedly available at selected schools, some teachers were found to be uncertain about how to use these, indicating the need for guidance on using supportive specialised resources and assistive devices. As a result, teachers at schools with supportive devices and resources will benefit from training on how to use these to the full benefit of learners with special needs.

Against the background of limited resources, teachers in South Africa are also required to be creative and use, for example, recycled material to make resources that can assist learners in class. In this regard, I found that teachers became aware of their own strengths as a result of their participation in this study, and started realising that they could use what they had in support of the learners they taught, including those

with visual impairment. Teachers furthermore realised the potential value of collaboration and working partnerships with one another and with stakeholders in the field of visual impairment in support of their implementation of inclusive education policy. In this regard, teacher participants realised their own value and became motivated to empower themselves and implement the strategies that were shared during this study.

Finally, I found that some of the teachers indicated the need for guidance in the manner in which to accommodate learners with visual impairment, for example by placing partially sighted learners in front of the class, creating space for unhindered movement in the classroom and printing in large font when required. In addition, guidelines for adapting school environments by painting school play grounds with bright colours for partially sighted learners were also mentioned as examples of strategies that teachers required knowledge on to be able to implement inclusive education policy successfully.

7.3.3 Secondary research question 3: How can expert stakeholders in the field of visual impairment contribute to the content and development of a postgraduate qualification for teachers of learners with visual impairment, based on their experiences in the field?

Expert stakeholders that worked in the field of visual impairment as stipulated in Chapter 4 were purposefully selected from different organisations and institutions in the country. They made a significant contribution in terms of the conceptualisation of the postgraduate qualification and possible content to include by sharing their ideas based on a collective wealth of knowledge and expertise. The development of potential module content was thus guided by the stakeholders in collaboration with the teachers and researchers. Stakeholders furthermore shared ideas on possible outcomes for the various modules and possible resources that could be included in training the students who enrolled for the programme.

In addition to the stakeholder participants having a wealth of experience and expertise due to working in the field of visual impairment, many of them were visually impaired themselves, allowing for contributions based on their personal experiences, for example in terms of actions and resources that may benefit a learner with visual impairment. Stakeholders shared their ideas and information openly and without

reservation, as they also believed that a qualification of this nature was much needed. In addition, they appreciated being heard and that their experience could contribute to positive change in a field that they were passionate about. They trusted the process and enthusiastically shared their thoughts on how and where to start in terms of developing the qualification, and what to include.

Expert stakeholders' contribution furthermore included references to the needs of learners with visual impairment and their teachers, similar to what the teachers alluded to. In addition to what was mentioned by the teachers, stakeholders indicated the need for the curriculum, question papers and textbooks to be adapted for learners with visual impairment. In summary, the fact that stakeholders were given a voice to express themselves in terms of an issue that they had knowledge of and that might have an impact on their community, provided them with an opportunity to rectify and bring forth what was necessary and beneficial to the visual impairment community. Through consultation with other stakeholder-participants, they had a platform to express their ideas and be included in discussions on issues related to visual impairment. This proves that the involvement of and consultation with relevant people can support the success a project, pointing to the value of following a participatory (PRA) approach when developing a programme or qualification. As such, PRA allowed the research team to obtain sufficient ideas that could inform the development of an Advanced Diploma in Visual Impairment Studies. Through their involvement, stakeholders furthermore became a community of support for one another and for teachers, as well as indirectly for learners with visual impairment.

7.3.4 Secondary research question 4: How do teachers and expert stakeholders experience their involvement in developing a postgraduate qualification during PRA research?

Participants received and experienced the PRA approach in a positive manner, voicing their appreciation for participating in an opportunity of this kind. Not only did their involvement in the PRA process assist them to form relationships and networks that were important and beneficial to the work they did, it also gave them a voice and allowed them to be heard in terms of the issues and challenges they experienced while living with visual impairment and/or working with learners with visual impairment. This, in turn, assisted the participants collaboratively to reach a common goal (inform the

qualification), which could in turn promote the implementation of inclusive education and provide relief for the visual impairment community, particularly for learners who were not sufficiently supported yet.

The PRA process that was employed furthermore created a space for the participants to learn with and from one another, share their views and knowledge without any judgement and negative criticism, and subsequently become a community of support to one another. Essentially, PRA allowed the participants to form partnerships with one another as teachers and experts in the field of visual impairment. In addition to the participants experiencing that all learners in schools were not sufficiently supported in the past because of teachers not having the necessary qualifications, knowledge or skills to work with learners with visual impairment, they also experienced not being heard or consulted for the development of or discussion on matters that concerned them and the visual impairment community. As such, both teachers' and expert stakeholders' participation in the PRA process enabled and empowered them to support learners with visual impairment more effectively and gave them a platform to work from, knowing that they possessed knowledge and could facilitate positive change.

As such, participants experienced PRA as an approach that encouraged them positively to impact the lives of learners with visual impairment. Teacher participants seemed aware of the needs and experiences of learners with visual impairment but did not know how to intervene or efficiently support them. Subsequent to being part of this study and openly sharing ideas with their peers, the participants became aware of different strategies they could implement, which contributed to their development as professionals. Furthermore, the teachers' realisation of the value of training and further training in the fields of inclusive education and visual impairment contributed to their personal development. More specifically, through their participation in this PRA study, participants became aware of the fact that they could benefit from furthering their studies by, for example, obtaining a qualification in the field of visual impairment.

Throughout, the PRA process assisted the participants to engage in regular reflection, allowing them to become conscious of the capabilities and expertise they possessed as well as the contributions they could make. Through their participation, participants were thus made aware that they had something to offer in terms of implementing

inclusive education policy and working with learners with visual impairment. Not only did they commit to contribute in making this study and the planned qualification a success, they also became aware of their responsibilities for including learners with visual impairment in the classroom and school context. Owing to the discussions during the PRA process, the participants were motivated to make a difference and realised that they had the competence and could capitalise on what they already knew to ensure that inclusive education policy was implemented and learners with visual impairment were taught and supported in suitable ways.

Finally, despite their overall positive experience of being involved in the PRA process, participants identified aspects that could have improved the process. They experienced limited awareness and accommodation of their special needs, due to, for example, hand-outs not being made available electronically or in Braille format by the research team. They thus advised that a person with visual impairment who understood and could advise what needed to be done when working with participants with special needs be included in the research team. More extended periods of engagement were also envisioned as beneficial. However, this recommendation may be linked to their experience of being heard, resulting in their wish to continue with discussions on the topic, despite data saturation occurring. Moreover, the participants' recommendation for extended sessions may relate to their wanting to provide more support to peers, as this was done during all sessions where ideas were shared with others.

7.4 CONTRIBUTIONS OF THE STUDY

In this section, I address the primary research question and foreground the potential contributions of my study to existing theory. In addition, I discuss methodological and practice-related contributions. The primary research question that guided this study was formulated as follows: *How can insight into the development of a postgraduate qualification in visual impairment studies inform the use of participatory methodology during programme development?*

7.4.1 Theoretical contribution

South Africa, as numerous other countries, agreed to the Salamanca statement in 1994, thereby committing to the implementation of inclusive education in all schools.

As this study included an exploration of participants' views on inclusive education and its implementation, the findings add to the existing body of knowledge in this field as well as the field of visual impairment. Theoretically, this study adds to the existing knowledge base on how learners with visual impairment can be included and supported in both full service and special needs schools, how equipped teachers currently feel to fulfil this task, and which resources and strategies could enhance implementation of existing policy on inclusive education. The findings furthermore highlight the fact that teachers already possess some knowledge and expertise to implement policy, yet may not be fully aware of their potential to contribute to positive change by implementing policy. The possibility thus exists that inclusive education policy is not yet optimally implemented in South Africa, due to teachers not realising their strengths and competencies, resulting in their being uncertain and hesitant to take on this task with confidence.

This awareness among the participants was made possible through the use of PRA methodology and was based on the theories I relied on as part of my conceptual framework. As such, PRA seemingly supported not only the conceptualisation of the postgraduate qualification, but also the participants' motivation to facilitate change. In addition, it motivated the participants to form a community of support and guide one another with ideas. Based on these assertions and drawing on my conceptual framework as alluded to in Chapter 2, as well as existing theories on programme development, I propose an implementable framework when using PRA during programme development or with practitioners. The framework is provided in Figure 7.1.

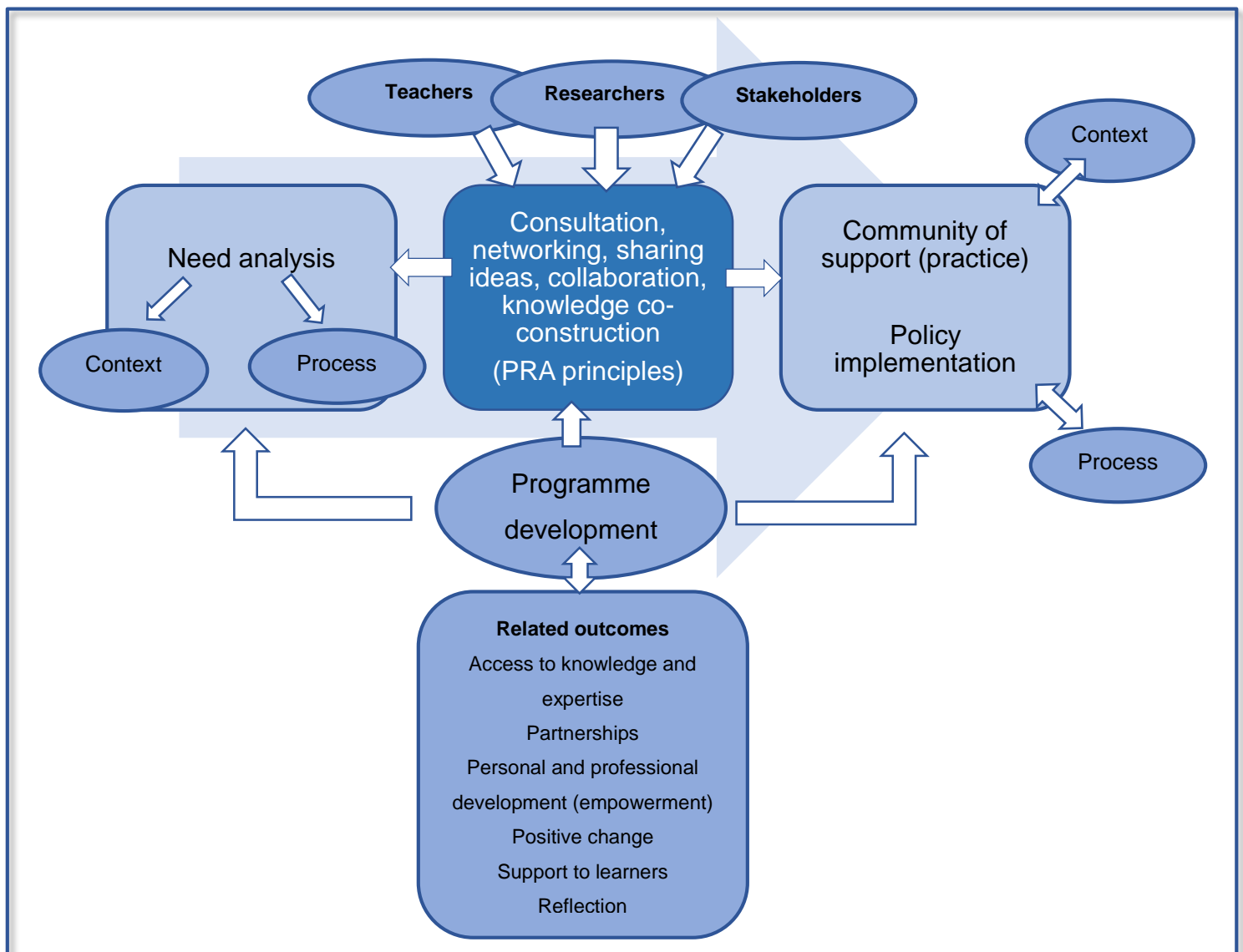


Figure 7.1: Framework for implementing PRA for programme or project development involving practitioners

Prior to developing a programme, its needs have to be analysed. In the case of the current study such needs were identified and analysed through consultation with teachers and stakeholders, focusing on the context and process of inclusive education policy implementation for learners with visual impairment. As learners spend a great deal of their time in school, this context was explored and considered to obtain guidelines for the process of implementation of policy in school. Due to strong partnerships and collaboration among participating teachers, stakeholders and with researchers, valuable ideas and expertise could be shared and knowledge co-constructed by all involved. In this stage, a community of support was formed between the participants that realised the significance of inclusive education policy

implementation and supported one another with this. Once again, context had to be considered as this community of support allowed participating teachers to develop their skills and bring about positive change in their classrooms (teachers' context) when working with learners with special needs.

As PRA typically facilitates a better understanding of reality, teacher participants gained access to strategies to support learners with visual impairment and implement inclusive education policy. Hence the process of implementing inclusive education policy in support of learners with special needs also became relevant in the sense that there was regular interaction between teachers among themselves as well as between teachers and learners during implementation. As part of the conceptualisation of a programme by following a PRA approach, important aspects of a needs analysis, partnerships (and other PRA principles) and the establishment of a community of support were thus possible, ensuring policy implementation, with the added outcomes/benefits of accessing partners' knowledge and expertise, with their in turn feeling empowered to instil positive change and support all learners.

If participants are treated as equal research partners, they can become reciprocal sharers of knowledge for the benefit of learners with visual impairment, forming a community of support (practice) as indicated in the framework in Figure 7.1. Through their active participation, teachers or other professionals and stakeholders will thus be able to determine the direction of a study and sufficiently inform the content under investigation.

Furthermore, as seen in the current study, the use of PRA in conceptualising a programme can make it possible to tap into participants' perceptions and expertise through structured discussions. In this way, participants form networks with one another to inform the development of a programme. Consultation and recognition of participants' knowledge can promote access to their insight and experiences that can inform, for example, the successful development of a qualification and formation of a community of support for positive change, as illustrated by the current study.

Being part of a community supporting and effecting positive change in the lives of others, such as learners with visual impairment, can be regarded as additional positive outcomes when applying PRA for programme development. Participants, for example, became more supportive to their learners in the course of the current study, which

provides evidence of the potential positive impact that PRA can have on practitioners and their everyday activities. The use of PRA furthermore empowers participants not only to be supportive to learners in this study but also to improve their levels of education by pursuing for further training opportunities.

The current study further builds on the co-construction of knowledge, which is one of the principles of the bio-ecological systems theory (Bronfenbrenner, 1990). Regarding visual impairment being a social issue that requires a community of practice (Kerno, 2008) – the participants, the findings I obtained furthermore confirms the importance of shared knowledge and the reciprocal sharing of expertise, which can in turn benefit the larger community. Contextual support and intervention by teachers and other stakeholders proved to be beneficial to learners with visual impairment, thereby also foregrounding the importance of context, as highlighted by both the social model of disability (Anastasiou & Kauffman, 2013) and the bio-ecological systems theory (Bronfenbrenner, 1990).

In summary, the conceptualisation of a postgraduate qualification has informed existing theory on the use of participatory methodology in the sense that PRA assisted in accessing the knowledge and understanding of participants by consulting and involving them to inform the development of a qualification. Structured discussions with the participants also assisted the alignment of ideas in conceptualising the qualification. Through the use of PRA, participants were able to reflect on their competencies and expertise and become aware of where they lacked knowledge. Based on the basic principles of PRA, researchers are willing to be taught by participants, forming trusting relationships and gradually taking ownership of the process of seeking solutions to problems or challenges experienced by the participants.

7.4.2 Methodological contribution

PRA entails a research approach that blends reflection with planning and actions in a participatory manner, involving participants as research partners instead of focusing on isolated activities. This study demonstrates how participants collaborated with the goal of discussing ways to support the implementation of inclusive education policy with learners with visual impairment, and also identify suitable content for a postgraduate qualification aimed at equipping teachers to provide such support.

Furthermore, participants were motivated to use and capitalise on what they already possessed in terms knowledge, skills and resources in support of inclusive education policy implementation and the teaching of learners with visual impairment. Through consultation with and involvement of teachers and expert stakeholders in the research process, PRA has thus proven to be a suitable approach to programme development in partnership and collaboration with relevant stakeholders.

In applying PRA for programme development in the context of special needs education, my study thus adds to the existing knowledge base on PRA. This approach is not necessarily followed when programmes are developed as other approaches may be considered (Consult Chapter 3), yet I applied PRA for this purpose to investigate the suitability of such a process when planning a new qualification. PRA links to some traditional approaches to programme development, and thus is implemented in a way that incorporates aspects of various other approaches. For example, in terms of the needs analysis approach, PRA allowed me to access the context and needs of teachers to implement inclusive education in support of learners with visual impairment. With regard to the outcomes-based and competency approaches, PRA, with the assistance of the participants, contributed in such a way that the qualification to be developed could be conceptualised and content and outcomes for prospective students be formulated. It follows that PRA has demonstrated in this study how the blending of various programme development approaches can be done in collaborating and reaching a common goal when all are equally involved in the research process.

As alluded to earlier, expert stakeholders contributed valuable input to this study, despite their often experiencing that they were not heard. Involving stakeholders has proven to be valuable in the sense that the participants assisted in addressing special needs challenges more effectively, sharing insight in terms of how to interact with learners with visual impairment and which classroom strategies could be beneficial, thus contributing to fellow teachers' professional development. Moreover, stakeholders collaborated with teachers to form a community of support, in turn supporting positive change in the visual impairment community.

In summary, PRA proved to be suitable for programme development for teachers in the South African context where learners may still be excluded from the education system due to disability. As the research partners in this study focused on the context

of learners and teachers who are meant to include them in their teaching practices, these considerations could inform the development of content outlines for the qualification. Based on the discussions focusing on inclusion as a topic that concerned all the participants, the teachers and stakeholders subsequently formed a community of support, all striving after including learners with visual impairment, making an impact in the visual impairment community and supporting teachers to do so – also in future after receiving training in this area.

7.4.3 Profession-related contribution

This study involved teachers from full service and special needs schools in South Africa. The PRA process that was followed allowed them to discuss their knowledge and expertise, learn from one another, and grow and develop as teachers in the field. Some teachers reported that, prior to their involvement in the study, they were not aware of some of the requirements when working with learners with visual impairment, such as specific communication and discipline strategies. However, through their active participation they could learn from colleagues and were able to start implementing some strategies in their own classrooms and schools in support of learners with visual impairment. Relying on PRA furthermore assisted me as researcher to view their context holistically and value their experiences as relevant, in turn allowing them to become aware of their own needs and those of the learners. In doing this, teachers were encouraged to remain reflexive, allow themselves to learn from their own mistakes and embrace the ideas shared by others. In addition, to facilitating positive change in their own classrooms and personal lives, teachers were able to establish working partnerships among themselves as a result of their participation in the PRA study.

As such teachers were able to reflect on their experiences, on what they were capable of doing and on the work-related opportunities they had, thereby identifying areas for further development. Through their participation teachers acquired the skill of mapping out their assets and resources, and then use these to their advantage and that of their learners. Regular reflection is regarded as important for all teachers as it positively impacts teaching practice, the teaching profession and teachers' skills.

On a practical level, the teacher-participants in this study were exposed to their colleagues' ideas of how to work with learners with visual impairment and with learners

with disabilities in general, thereby changing their interaction with these learners in a positive manner. As professionals, teachers from both full service and special needs schools acquired ways that could be implemented in teaching and supporting learners with visual impairment, managing their classrooms and how they could rely on one another for support if needed. Due to the fact that this study involved participants from different groups, the ideas shared can be incorporated and implemented accordingly. As PRA brings people together to capacitate themselves and seek solutions to real-life issues, teachers were able to form partnerships and learn from one another.

In the case of the expert stakeholders who were involved, this study allowed them to be heard, allowing them to make contributions to the conceptualisation of a qualification in visual impairment studies, by implication to the visual impairment community. By involving stakeholders from various organisations in the country, participants could form and renew networks, which might in turn positively impact the work that they did a daily basis for the sake of people with visual impairment. They furthermore became proponents of the initiative that is undertaken with the qualification, and started spreading the message of the qualification to others they encountered. In this way, the possibility exists that additional people may learn of and pursue the opportunity for specialised training in this area in future.

Finally, the findings of this study may assist people in helping professions such as nurses, educational psychologists, occupational therapists, social workers and counsellors to better understand the needs and frustrations of learners with visual impairment. Knowledge of these aspects may assist such professionals in their service delivery by referring learners to relevant specialists in the field, drawing up relevant intervention plans that may support these learners and promoting their participation in learning activities.

7.5 STRENGTHS AND LIMITATIONS OF THE STUDY

A significant strength I identified in my study relates to the strong participant base, including participants' representative of different groups of people in the country with each of these groups coming from a specific background and allowing for directed and rich contributions. Based on the selected methodology, teacher participants could be involved in PRA activities and also be observed in their classrooms, allowing for a broad understanding of their implementation of inclusive education and support of

learners with visual impairment. During school visits, available resources could also be observed, and how these were utilised in the case of learners with visual impairment. It follows that the selected methodological approach encouraged contributions by experts in the field.

Another strength of this study relates to the fact that it had a positive impact on the teaching of the participants, due to the specialised group and social justice agenda as well as the focus on policy implementation. This focus resulted in commitment, passion and participants wanting to form part of the large-scale initiative, which was naturally supported by growth and positive change.

In terms of possible limitations based on the methodological choices I made (Consult Chapter 4), I have already referred to the fact that the findings of this study are not generalisable. It was, however, not my intention to generalise as I focused on a specific phenomenon and context. In relying on a case study design, I intended to gain detailed insight into a specific occurrence with the aim of providing rich explanations regarding the utilisation of PRA for programme development. However, transferability of the findings may be possible to other similar studies on programme development. The decision about transferability lies with the reader.

As participatory researcher, I also faced the challenge of potentially being subjective and biased, thereby influencing the research process and my interpretation of the data. However, I relied on reflexivity and engaged in constant consultation with my supervisor and co-researchers to guard against this. I was furthermore not aiming for objective results but focused on obtaining a deep understanding of the ideas and perceptions of the participants.

As research for this study involved teachers, PRA-meetings over two days after school hours proved to be a challenge at some school where teachers were involved in after school activities or preparing learners for assessments. Even though we could not include all teachers in these cases, we worked with the teachers who were available, assuming that their views would be representative of those that could not attend the discussions.

As my study involved some participants with special needs and data generation and member-checking sessions being held at a central venue, they had to travel to the venue and navigate themselves in an unfamiliar environment. This challenge was

overcome by involving a number of research assistants who assisted participants with visual impairment. Although most of them were independent and may have had assistants themselves, we saw it fit that our research assistants remained on standby to assist where required. In addition, the two stakeholder meetings were held at the same venue.

Finally, even though the fact that only a limited number of participants attended the member-checking colloquiums can be seen as a possible limitation. I am of the view that those who attended were able to confirm the data analysis and initial themes on behalf of their peers not attending. I also included various data generation techniques and six colloquiums for member-checking purposes, supporting my view that the limited number of participants attending member-checking colloquiums did not negatively impact the findings of the study.

7.6 RECOMMENDATIONS

Based on the findings of this study, I make recommendations for training, practice and future research in this section.

7.6.1 Recommendations for training

The findings of this study indicate that teachers still feel uncertain about the implementation of inclusive education policy despite efforts to prepare them for this. As a result, I propose that existing and new teachers be provided with inclusive education training, or in the case of teachers having been trained, refresher courses on inclusive education policy implementation. Such training or refresher courses should not focus on knowledge only but should specifically deal with practical implementation guidelines.

Furthermore, I recommend that teachers and stakeholders receive training on the value and process of establishing and sustaining professional relationships. Although many relationships were established in the course of this study, it may be valuable for teachers to learn how to build on such partnerships and mobilise support in the absence of researchers facilitating discussions in this field. Various organisations and/or schools may form part of existing or new partnerships, allowing participants to access the knowledge, expertise and support of others, in support of their own practice.

Next, I recommend training for current and prospective teachers on the use of resources and assistive devices for learners with visual impairment. There is no value in schools having resources and devices available but having these stored away due to teachers not being equipped to use them. Such training can involve all teachers at all schools, as any teacher may be required to work with learners with visual impairment sometime during his/her career.

In addition, based on the positive outcome of following a PRA approach in this study, I recommend that teachers and stakeholders in the field of visual impairment receive training on the use of PRA. The specific value of this lies in the principle of regular reflection, which can assist teachers to recognise existing assets and resources and then use these to address challenges – not only those related to inclusive education policy implementation but also to other challenges that may arise in future.

Finally, in terms of the qualification that has been developed as part of the broader project my study forms part of, I recommend that all current students in education as well as teachers already in the profession be informed about the postgraduate qualification in visual impairment studies. Teachers can be encouraged to enrol for the programme in future, as they may be better equipped to implement inclusive education policy following completion of the programme. Avenues of financial support for teacher enrolment should also be explored and pursued by the institution offering the programme.

7.6.2 Recommendations for practice

I recommend the use of the PRA framework I compiled for future programme development initiatives. This framework can assist people in any profession and related stakeholders to identify ways of addressing challenges while being supported by others with similar goals and functioning in similar contexts. The framework may furthermore assist participants to understand and reflect on their own needs and capabilities, seeking solutions based on what they know and can do. Therefore, based on the benefits of taking ownership and collaborating with other stakeholders when developing a qualification, a PRA approach may result in a programme that is well-balanced and addresses the ideas of people who have first-hand experience in the field

Considering that teachers, particularly from full service schools, may not yet feel sufficiently equipped to work with learners with visual impairment, I recommend that they form partnerships with other schools, for example special schools, to share guidelines on how to work with such learners. This recommendation implies the potential of strengthening partnerships and disseminating knowledge on a broader level. Through this, the inclusion of all learners can be promoted and teachers may be further capacitated.

In view of the shortage of healthcare specialists in the South African school context, I also recommend that teachers liaise and form partnerships with local departments of health and/or specialists willing to do pro-bono work at their schools. This may be combined by an awareness campaign to teach the school communities and parents of the impact of disabilities, of which visual impairment is but one.

Furthermore, I recommend that PRA be utilised when wanting to gain insight into participants' expertise when conducting future research involving groups of experts and focusing on a specialised topic. Their expertise and experiences should accordingly be considered as valid and valuable. By consulting and collaborating with experts in the field, the rigour and accuracy of a study may be enhanced, furthering the possibility of transferability.

7.6.3 Recommendations for future research

I recommend the following possible topics for future research:

- ❖ Case study on the importance of prior training or preparation for emerging PRA researchers when involving people with special needs as participants.
- ❖ Descriptive study on the possibility and effect of special needs schools teachers disseminating knowledge and expertise to their full service school counterparts in promotion of learners' inclusion in all schools, despite differences and disabilities.
- ❖ Explanatory study on the inclusion of learners with visual impairment subsequent to their teachers receiving training in inclusive education and the use of specialised resources and assistive devices.
- ❖ Case study on the application of PRA principles in establishing and sustaining working partnerships between teachers and stakeholders in other fields of expertise, such as education reform and transformation that may also assist them in their tasks as teachers.

- ❖ Case study on the functionality of School and District Based Support Teams (SBST and DBST) in supporting learners with disabilities, such as visual impairment.
- ❖ Exploratory study on how participatory methodology can support the establishment of a community of support and what the effect of such a community of support may be.
- ❖ Case study on the significance of in-service and mentor teaching for implementation of inclusive education policy in support of learners with visual impairment.
- ❖ Explanatory study on the successful transition of learners with visual impairment to adulthood and the world of work.

7.7 CONCLUDING REMARKS

The purpose of my study was to explore, describe and explain the process and effects of following a PRA approach when conceptualising a postgraduate qualification (advanced diploma) for practising and prospective teachers. In the study I found that the participants collaborated with researchers in reaching the joint goal of conceptualising and identifying suitable content for the proposed qualification. Participants displayed commitment and were enthusiastic to contribute, due to their seemingly realising the importance and potential value of the qualification, appreciating that they were being heard, and experiencing themselves as partners that were valued for their knowledge and expertise in the specialised field of enquiry.

Based on the study I completed, I can thus conclude that PRA is suitable for accessing research partners' knowledge and expertise when developing a qualification. I furthermore posit that the participants valued the opportunity to become research partners and collaborate with counterparts to reach a common goal. Participants valued the fact that they were given a voice through participation in this study, in addition to allowing them to learn from others and become part of a community of support. In the process, their involvement in the PRA process facilitated personal and professional development among the participants, as they became increasingly conscious of their own competencies and work-related responsibilities. Participants subsequently felt empowered to instil positive change and further equip themselves for future studies.

The findings of this study therefore imply that it is possible to utilise PRA when accessing knowledge and experiences of informed people in different professions for programme development. Collaboration is easily established when participants and researchers share similar interests, thereby contributing to the success of such an approach to programme development. In future, the framework I proposed in Section 7.4.1 may be applied to programme development, allowing researchers or academics to form partnerships and collaborate with participants to reach common goals successfully by relying on the underlying principles of PRA.

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LIST OF APPENDICES¹¹

Appendix A

Member-checking PPP on proposed structure for qualification

Appendix B

Fieldnotes and reflective journal (Examples)

Appendix C

Interview guide

Appendix D

Visual and audio-visual data (Examples)

Appendix E

Photographs of available resources at visited schools (Examples)

Appendix F

Interviews (Example)

Appendix G

Step 2 data analysis – In word document titled posters, FN, RJ, Int include in thesis (G and H) (Examples)

Appendix H

Step 3 data analysis – Also in word document titled posters, FN, RJ, Int include in thesis (G and H) (Examples)

Appendix I

Step 4 analysis

Appendix J

Step 5 analysis

Appendix K

Member-checking PPP on themes and subthemes

¹¹ Where suitable, only a few examples are included in this document, however all data are included in the separate folders and documents accompanying this thesis.

Appendix L

L1 – Free State permission letter

L2 – Gauteng permission letter

L3 – Limpopo permission letter

L4 – KwaZulu Natal permission letter

L5 – Eastern Cape permission letter

Appendix M

M1 – Informed consent letters Ethics for teachers

M2 – Informed consent letters Ethics for stakeholders

Appendix N

Summary of findings (Tables)

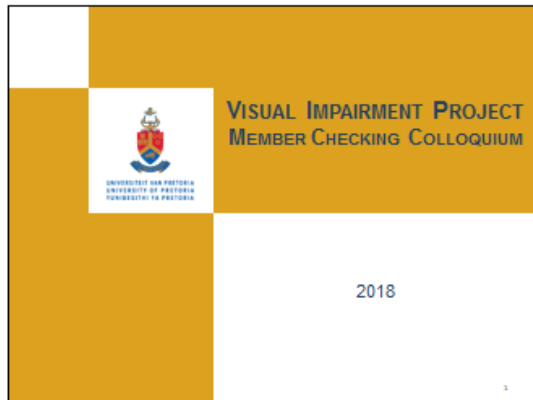
Appendix O (No examples included here, only included in separate folders)

School visits

Appendix P (No examples included here, only included in separate folders)

PRA reflections by teacher- and stakeholder-participants

APPENDIX A – MEMBER-CHECKING PPP ON PROPOSED STRUCTURE FOR QUALIFICATION



Introduction

- Part of a Department of Higher Education and Training/European Union initiative at national level:
 - Visual impairment (University of Pretoria)
 - Deaf and hard-of-hearing (WITS)
 - Neurological disabilities (University of Johannesburg)

Purpose and deliverables of the UP project

- Research with teachers and stakeholders
- Programme development (Adv Diploma)
- Material development (OER)
- Establishment of a Centre for Visual Impairment Studies (CVIS)

Core team

- Four academics

- Four part-time administrators
- Three part-time assistants
- Five postgraduate students

Phases of the project

- Nov-April**
 - Data generation at full-service and special schools
 - Data generation during stakeholder colloquium
- April-May**
 - Data analysis
 - Draft outline of postgraduate programme and modules
- May-June**
 - Member checking during five colloquiums: Pretoria, Pietermaritzburg, Polokwane, Bloemfontein, Mthetha
- July-Sep**
 - Follow-up stakeholder colloquium, Module writer workshop
 - Development of programme, module content and OER material


Progress of research project

- Research in schools
 - 7 full-service and 10 special needs schools in 5 provinces, 255 teacher-participants
 - November 2017 to April 2018
 - Prompts for discussion
- Research with 50 experts at a colloquium
- Data analysis and draft outline of programme




More about the postgraduate qualification

- Advanced Diploma in Visual Impairment Studies
- NQF level 7
- Target market
- Distance education mode of delivery, with the option of contact mode later
- Minimum two years, maximum four


 University of Limpopo

- Open educational resource material
- Entry requirements
 - Bachelor's degree or other recognised teaching qualification
 - Competence in Braille (option of a short course)
- Training teachers across spheres to teach learners who are visually impaired

 University of Limpopo

Proposed core modules

Description
• Understanding inclusive education and disability as diversity
• Understanding and teaching learners with visual impairment
• Supporting learners who are visually impaired
• Research and practice in visual impairment

 University of Limpopo

Proposed elective modules

Description

- Orientation and mobility
- Assistive technology for learners with visual impairment
- Stakeholder partnerships
- School leadership and classroom management



Faculty of Education

Discussion of core modules



Faculty of Education

UNDERSTANDING INCLUSIVE EDUCATION AND DISABILITY AS DIVERSITY

- Human rights and policy issues:
 - International policy on human rights
 - South African constitution and SA Schools Act
 - Policy of Inclusive Education (White paper 6)
 - Copy right law
- Addressing diversity:
 - Forms of disabilities
 - Identifying disabilities (including SIAS)
 - Support and referral
 - Multiple disabilities
 - Visual impairment as example of a learning disability



Faculty of Education

UNDERSTANDING AND TEACHING LEARNERS WITH VISUAL IMPAIRMENT (1)

- Understanding the visually impaired learner:
 - History of Visual Impairment
 - Forms, conditions and courses of Visual Impairment (VI)
 - Medical, social, psychological and educational implications of VI, including behaviour and mannerisms of VI learners
 - Needs of the VI learner



Faculty of Education

UNDERSTANDING AND TEACHING LEARNERS WITH VISUAL IMPAIRMENT (2)

- Identification and teaching of learners who are visually impaired:
 - Implementation of the SIAS document (assessment, IEP, accommodation, referral and concessions)
 - Curriculum differentiation (knowledge of curriculum development, adaptation, enriched curricula and assessment)
 - Inclusive pedagogy with learners who are VI (supportive learning environment, communicating with learners who are VI, adapting learning, teaching and support materials, teaching aids, introduction to classroom management, extra curricular activities [computers and assistive devices])



Faculty of Education

SUPPORTING LEARNERS WHO ARE VISUALLY IMPAIRED (1)

- School and classroom support:
 - Introduction to orientation and mobility
 - Skills of daily living
 - Peer support and addressing stigmatisation and bullying
- The teacher's role in supporting learners who are VI:
 - Skills requirement
 - Continuous teacher professional development
 - The teacher as lay counsellor
 - The teacher as career guidance facilitator
 - The teacher as researcher
 - The teacher as first aid assistant



Faculty of Education

SUPPORTING LEARNERS WHO ARE VISUALLY IMPAIRED (2)

- Social skills and integration support:
 - Self-awareness and self-esteem
 - Gender roles and sexuality
 - Self-regulation
 - Blindsight
 - Relationships across developmental groups and gender
 - Respect and acceptance of diversity
 - Learning to set boundaries
- Family-based support:
 - Role of parents and other family members
 - Parent/school involvement / collaboration
- Accessing professional support services:
 - Occupational therapy, psychologists, nursing and other health practitioners, social workers, etc.



Faculty of Education

RESEARCH AND PRACTICE IN VISUAL IMPAIRMENT

- Facilitating positive change:
 - Theory of change (comprehensive description and illustration of how and why a desired change is expected to happen in a particular context.)
 - Applying theory to practice
 - Accessing open educational resources
- Supporting a learner for transition (portfolio):
 - Identification and assessment of a learner
 - Support plan for the learner
 - Career guidance to the learner
 - Involving other support agents
 - Facilitate positive transition



Faculty of Education

Discussion of elective modules



Faculty of Education

ORIENTATION AND MOBILITY

- Safe school and classroom environments
- Using a cane
- Technology-based assistive devices
- Independent functioning and daily living



Faculty of Education

ASSISTIVE TECHNOLOGY FOR LEARNERS WITH VISUAL IMPAIRMENT

- Computer literacy
- Tactile awareness
- Current technological development
- Use of mobile devices
- Braille-technology integration



Faculty of Education

STAKEHOLDER PARTNERSHIPS

- Identification of potential stakeholders (systems theory)
- Collaboration and networking (entrepreneurship)
- Potential value of peers
- Maintaining partnerships
- Community outreach



Faculty of Education

SCHOOL LEADERSHIP AND CLASSROOM MANAGEMENT

- Understanding current policies
- Leadership and management
- Classroom management
- Managing behaviour and mannerisms of learners who are visually impaired
- Managing the learning and well-being of staff and learners in support of resilience



Faculty of Education

Thank you!

13

APPENDIX B – FIELDNOTES AND REFLECTIVE JOURNAL (EXAMPLES)

Reflective journal and fieldnotes

RJ – 29 January 2018 (School 1)

- Educators find it rewarding to be helping and teaching VI learners
- Although educators do not know everything they are willing to learn
- Increased confidence in the implementation of IE witnessed
- Educators are aware of their limitations and challenges
- The responses came naturally, no referral to books or internet
- Theme: “confidence in IE implementation among specialised school educators”
- Interaction with learners seemed very natural and learners also cooperated well and understood their educators – observed educator also appeared confident and knowing learners’ level of understanding “this is where I will stop as I want the information to sink”
- Read more – resources/assistive devices for the blind and VI
- Comfortability of educators to teach us new things and explain to us some their responses
- TB- Totally blind
- Educators are excited about their gifts and meeting again for the MC colloquium
- Very close relationship exist among participants

Stakeholder participation – 25 April and 26-27 September 2018

- Unhappiness from some stakeholders because of no Braille programmes and presentations
- So much wisdom in one room
- The manner in which stakeholders are showing commitment, one would swear that they were never given a chance to talk about things that concern them
- They are specific about what needs to happen and how
- They seem to have experienced an opportunity to be involved in VI issues
- They seem to notice the future prospering of this qualification as it is needed
- Stakeholders’ active involvement seem to be the result of their inclusion in qualification development which is good thing for the qualification
- Stakeholders are motivated to do more for the success of the qualification
- They seem to be convinced that this qualification will definitely assist teachers, therefore them becoming part of positive change
- I think the venue with flatter grounds would have been helpful for them
- Recap needed as participants have not been informed of progress for about 4 months
-

The few educators that were present gave their all to participate and mentioned that the qualification will be really useful.

Observations and fieldnotes

OBSERVATION SCHEDULE FOR UNOBTRUSIVE CLASSROOM OBSERVATION

Information about class observed: School 9 5 March 2018

Grade of learners:	6
Number of learners in class:	15
Number of functionally blind learners:	9
Number of learners with low vision:	
Lesson observed:	Maths (fractions)

Classroom walls: Are classroom aids on walls accessible/adapted? Describe/photos.

Clean with same Rand Water poster class time table and duty list and world map.

Field notes on classroom atmosphere/culture, teacher behaviour, learner involvement, differentiation:

Teacher opened curtains on one side and one learner, closed them. Learners are quiet and listening attentively only speaks when spoken to. Each learner is sitting with a Braille machine. One albino. Teacher explaining instructions about twice and asked if they understand, they same to understand as they give correct answers.

Adaptations:

Environmental adaptations:	
Lighting: Learners seated according to individual lighting needs. Table lamps?	No tables, lights but curtains.
Desk space: Enough space for material/supporting tools?	Yes
Classroom space: Can the learners move around freely without bumping into obstacles?	Yes
External noises: Any noise distracting learners from listening to the lesson?	Grass mowing was taking place which was disturbing.
Technology for academic areas: Highlight aids in use.	
Reading aids:	
Writing:	High contrast pen, portable word processing device, typing with audio support, Braillewriter, voice recognition, bold-line paper, raised line paper Other: Only Braille machine, no black/white or any writing board.

Environmental adaptations:	
Math	<p>Large print measuring tools (rulers, protractors), large key calculator tactile measuring devices, abacus, talking calculator, models or 2D & 3D geometric shapes. Other: Today's lesson is fractions, so she's explaining looking from the textbook.</p>
Pictorial information	<p>Enlarged format. CCTV, models or objects, tactile graphics, tactile-audio graphics Other:</p>
Note-taking	<p>Slate and stylus, tape or digital recording device, computer-based recording software, electronic Braille notetaker Other: Learners are just listening not taking notes.</p>
Computer access	<p>Large operating system features, built-in Magnification, magnification with screen reader, screen reader, screen reader with Braille device, large print keyboard stickers, Braille keyboard stickers Other:</p>
Low-tech, self-made adaptations/learning aids	

Environmental adaptations:	
Assessment	Monitoring and make adjustments for visual fatigue Modification of length of assignments, tests, exams Extended time for assignments, tests, exams Test items explained or paraphrased as needed Amenuensis Access to notes/text/learning materials such as tactiles/manipulatives during tests, exams Other:

Please mention any other aids not on this list.

Shaded – how do learners know? Learners are wearing jeans in school, shoes with school shirts and jerseys. Learners are taught to do () with their hands.

ANY OTHER OBSERVATIONS/Notes

First day: 24 October 2017: Notes – School 1:

There was a lot of commotion in the school after explaining the consent form;

A lot of teachers had a problem with signing the consent form, the room was packed and there was no space for them to move around and work;

It was difficult to group them as well as, no co-operation with regard to the excitement of activities;

Teachers had a problem with the hours created for the session, and complaining they want to go home;

Some teachers arrived late;

One teacher requested that tomorrow we start at 11:00 as he is leaving;

Some teachers left even wanted to cause commotion; Very unwilling to stay and had a problem with signing consent forms;

Solution was that I return tomorrow morning during briefing time;

Answers were checked from Google by most educators;

Some seemed uninterested;

Some were making notes on their own on the side first before joining in with the rest of the group;

The room was small and cramped up;

Because they were in a hurry to leave, deputy principal suggested that we start with the work because if they can eat first they will literally leave and so we did that;

Giving out of food is another chaos, everyone wanted to be first.

Day 2: School 1 (25/10/2017)

Today we started with a prayer, they asked for a Sotho prayer;

More calm today and willing to participate, some who didn't sign the consent form were asked to sign it;

Principal was present;

Some groups were struggling to come up with ideas;

I have not observed any Googling today;

There's much more order and co-operation than yesterday;

They decided to sit in groups according to their grades, they said they usually work better like that;

More open space as we moved to the support centre;

Due to the morning session, we suggested to bring food later but deputy principal thanked them saying we have done enough already.

Grade 1: Maths Numeracy lesson: Classroom observation

They are in different groups with other learners without challenges, one is very forgetful (poor visual memory);

Other girl likes asking to go to the toilet;

3 learners who she regards as visually impaired (2g – 1b), the other girl is repeating;

Beautiful classroom management – greets;

Poor concentration by those who are VI;

One girl struggles to identify numbers from a printed sheet, and writes it on the board, boy can, all three of them never raised their hands to answer teacher's questions.

Grade 7

Shy, reserved, slow (extra time) reading problem;

One boy can't see white and green on the board, sees yellow, small hand writing average;

Girls can't see when at the back, big hand writing, poor concentration;

1 girl – headache/red a tired and watery eyes, in a day- high achievement;

Font 12 accommodates when necessary;

- ❖ 50 learners;
- ❖ Referral system;
- ❖ None of VI learner's parents are not support.

Reflection – School 1

The initial welcoming was great, we were even given food – very warm welcome by principal, deputy, admin staff and the support teacher;

When it was time to start with the real job, there was no co-operation from educators at all, complained they were not informed, they can't stay long, they just could not stay put and quiet and at least hear our story. At this point I feel I just don't know how to work with a big group, they were 46 and some of them literally walked out;

I felt the principal needed to be in the room to calm them down, although deputy tried, she really also struggled with them;

It seems like they have very limited knowledge of i.e. as they relied on the internet;

Maybe they thought we were going to provide a workshop where they would just listen and maybe not participate?

Some educators were actually nice individuals;

First day really did not work well for me;

not even presentations were done even on second day because they had to go to class;

they refused to sign the consent form;

I noticed that educators in this school were hardly co-operative if they will not benefit anything valuable'

Some seemed to perceive i.e. as impossible give their school context;

What shocked me was the rush to food and some offering to dish up.

APPENDIX C – INTERVIEW GUIDE

1. Briefly elaborate on your qualification/line of work
2. In your understanding what does visual impairment mean?
3. What are the needs of learners who are visually impaired?
4. What are the needs and expectations of educators of learners who are visually impaired in both specialised and mainstream schools?
5. To what extent has the training by departmental officials (if provided) on the implementation of inclusive education policy helped you to support learners who are visually impaired, how best can this policy be implemented?
6. What are competencies (skills) for implementing inclusive education policy in support of learners who are visually impaired? Can these skills be acquired through experience or only by means of formal training? What level of training?
7. How can stakeholders other than educators contribute to the development and content of a postgraduate qualification for educators of learners who are visually impaired, based on their experience in the field?
8. Which material do you think should be included when developing a postgraduate qualification in this field and why?

APPENDIX D – VISUAL AND AUDIO-VISUAL DATA (EXAMPLES)


What do I know?

- Know braille & mobility
- Curriculum differentiation/adaptation

What can I do?

- Involve department of Education to assist in terms of resources.
- Sensory training to stimulate sense (braille users)

How Ready Am I?



Knowledge

0 5 8 10

Skills

0 5 8 10



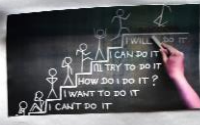
What do I still need to learn?

- Braille (Blind) for reading & writing
- Causes of Blindness
- Different types of blindness
- Placement of a the learner in the classroom.
- Partially sighted > Enlarged print
- Where by the fonts sizes differs according to vision of individual learners
- Adaptations of activities


Which skills do I need to acquire?

What do I still need to learn?

WHAT SHOULD BE INCLUDED IN A POSTGRADUATE QUALIFICATION IN VISUAL IMPAIRMENT?

- Braille knowledge
- Anatomy of the eye
- Eye conditions and eye diseases
- Causes of blindness
- Educational implications of blinds
- Physio-psychological implications of blindness
- Orientation & mobility
- Social aspect of blindness
- Mastery of equipments and software of the blind.



WHAT DO TEACHERS NEED?

KNOWLEDGE

- * Training
- * Knowledge about teaching Blind learners
- * Teaching in a Special School (the difference)
- *

SKILLS

- Braille reading and writing
- Teaching Blind learners and Partially Sighted
- Orientation and Mobility

RESOURCES

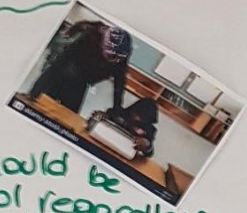


- Computers
- Programmes eg Jaws
- Peckmats
- Apex
- Perkins Brailers etc

HOW READY ARE WE?



INCLUSIVE EDUCATION



1) All learners are inclusive to education.

- All learners should be admitted in school regardless of the physical disability/impairment.

What does policy say?

2) Every child has a right to learn regardless of their physical disability, eg. wheel chairs, poor eyesight

- School must ensure that the its environment is conducive for those learners.
 * Learners on wheel chairs should have walkways + suitable toilets for them.
 * Eyesight problem: learners should be moved in to the front of the class, also the font should be bold.

Implications?

What?

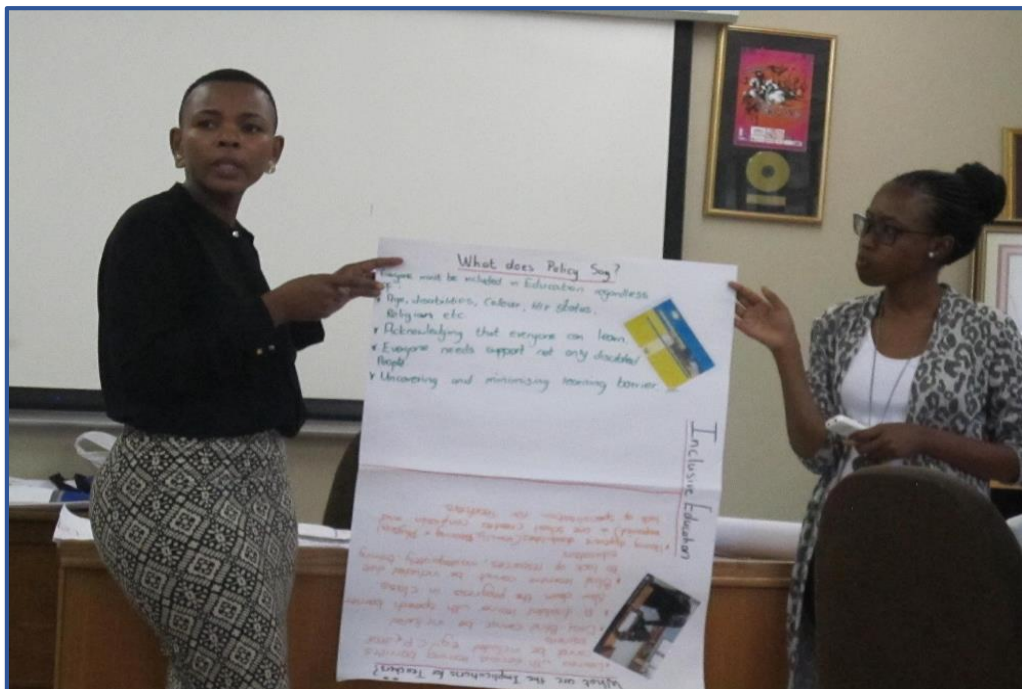
3) There are no slow/retarded learners according to the policy.

- All learners are equal, they have to be taught according to their pace.
 * Remedial work
 * Referral processes to the take place if necessary.

For teachers?

4) Learners should not be discriminated against their religious, cultural, societal beliefs.

- They have
 - According to the bill of right, all learners have a freedom of association.



**APPENDIX E – PHOTOGRAPHS OF AVAILABLE
RESOURCES AT VISITED SCHOOLS (EXAMPLES)**









APPENDIX F – INTERVIEWS (EXAMPLE)

I2 - LSA 1 21 February 2018

Facilitator: Thank you for agreeing to do this and for signing the consent letter. Please state your qualifications please?

Respondent: My education diploma in hearing impaired, that is the specialized further education diploma in remedial, honours in learner support, honours in education management law and policy.

Facilitator: Okay, and your line of work in the district?

Respondent: I'm a learning support advisor from Grade R to Grade 7.

Facilitator: Feel free to speak your language. What is your opinion on what visual impairment means?

Respondent: Not being able to see.

Facilitator: What do you think are the needs of visually impaired learners, especially in the classrooms that you've been through?

Respondent: Do you mean classroom arrangement or management? Number 1 a teacher must first identify whether a child is visually impaired or not. We have a 3D chart which we normally encourage educators to use before tuition can take place, with the intention to identify such learners at an early stage. Based on that it is used as a screening tool. Based on that the parents are made aware for further referral maybe to the clinic to see a specialized somebody based on the results received, maybe take them further if the child needs spectacles the child will be provided with such. If there's any other related challenges which are going to impact on the learner's vision for future so that they can make us aware.

Facilitator: The needs of educators?

Respondent: They must have a background in terms of if a learner cannot see what are the implications and they also need to be given tips on how to identify such learners. As I indicated earlier on, they can use the 3D basic and/or sometimes some

learners bring along letters from therapists which will inform the educator that the learner must be seated at the front of the class, with spectacles ..., unfortunately the educators are not aware of the different colours used based on the challenge the child is having. The different papers which can be used by the learner to read or write from. It's a need because as inclusive I can't remember us emphasizing that unless we pull in somebody that can justify it. And then some learners are identified to be having barriers because the child is expected to copy from the board, only to find that they just write senselessly, then the teacher associates the senseless writing as stupid, and not realizing that the child is visually impaired. They realize later that the real problem is much more than not being able to see is when the learner asks another learner to read for them and then they respond. Training on how, what and why is required, in depth training.

Facilitator: Speaking of training, is there any sort of training happening for teachers that you know of concerning visual impairment?

Respondent: Not really because as inclusive educators, we do it but not in depth, unless if an educator identified seminars and other things ..., maybe people that stand an advantage of knowing better or best are those who live in a vicinity such as this one, like Thiboloha for them to learn more and for them to be able to assist people.

Facilitator: What do you think Paper 6 actually means, inclusive education?

Respondent: We are not supposed to ..., we are segregating the learners, we are supposed to, but they must be supported, like the example I sighted of specialized institutions where a child with visual impairment ..., according to the White Paper, if a child is in Zamdela they must be taught where they are living. Unfortunately be that as it may, because of some of the resources it's just impossible that ... (unclear) there's blind learners, there's going to be a Braille machine for 1 or 2 learners.

Facilitator: For you as an official what makes it difficult to implement inclusive education, what are the challenges that you are facing?

Respondent: Over-crowdedness, educators and the attitude of teachers and sometimes, I believe, as an official that information on inclusive education is not well advocated even to other officials, at district level. We have been talking about the White Paper 6 for the past 18 years, some of the officials are not sure what is exactly

expected of them. That contributes to it not to be fully implemented because the right hand does not know what the left hand is doing.

Another one relates to our principals, provincially, people mind their own business, there is no collaboration, and that in itself poses challenges. Another example, as an official, I get a referral from the school, the child cannot copy from the board and all that. We deal with it because we are an inclusive school. DBST is still a challenge in terms of functionality because if it was functional it would be much easier to implement. In some instances when the curriculum people are checked, the assessments reveal that some children need a lot of assistance with writing. The educator learns that the officials know nothing about this, and according to assessment standards, writing is also assessed. The learner suffers at the end of the day.

Facilitator: The people from curriculum form part of DBST as well?

Respondent: Exactly, they have to but in this case DBST is currently not functional, we are all working in silos and unfortunately at the end the person who suffers is the child, hence we end up doing outplacements, whereby a child brings a doctor's report based on the level of their sight can be placed in a special school.

Facilitator: What are the skills or competencies that you have that you are trying to make sure that inclusive education is implemented?

Respondent: Information sessions, advocacies of parents, the community, educators, sometimes even the learners themselves, to advocate processes as to what they are, why, and who, why, what and at the end how can we assist. But now that we have a policy on ...SIAS??, it has assisted to package the processes, more so because it involves everyone in whatever stage they are ..., parents are involved from the very first stage where we need background information from the child's conception which in the end assists as to what it is or how best educators or schools to support the learner.

Facilitator: Like I said initially that we are trying to develop a qualification ..., what do you think would be necessary to include ..., whoever would be applying for such qualification before they can stand in front of a classroom of learners who are visually impaired, or a full service school for that matter. What is it that they need to know through this qualification?

Respondent: Maybe they would need to have an understanding physiology, like maybe the eye, which will explain everything in terms of the eye, for instance how to care for it, and the importance of vision in a person holistically, then in this regard in terms of the learner becoming a beneficial citizen of South Africa in as far as education is concerned.

Facilitator: Okay, do you think we need to include this White Paper again as one of the modules sort of?

Respondent: Yes, more so because anyway in some instances, not only for educators or schools, the parents tend to say my child is visually impaired, therefore where do I take my child if they are visually impaired, so just to make them aware, it is our role to make them aware in order to remove the stigma.

Facilitator: And do you think any other ..., you referred to parents, stakeholders, would they benefit from that qualification?

Respondent: Stakeholders ...

Facilitator: For example you as officials would you be interested in applying for such a qualification?

Respondent: Yes

Facilitator: Alright, end of my story, unless if you have anything else to add.

Respondent: I am not sure what else you needed to know which I did not share with you

Facilitator: You gave me enough ..., it's amazing how you say you did hearing but you also knowledgeable about visual?

Respondent: The school that I come from had both visual and hearing, so you were only allowed to choose one disability, although I was more involved with the deaf, so we had deaf, the blind and the SLD, the MID, the disabled, then we did it with the Department of Education at the time (DBE Pretoria).

Facilitator: Okay, I'm satisfied, I'm really happy, thank you very much.

Respondent: What about Braille machines and other supporting resources for the visually impaired, have you looked into that?

Facilitator: I did, I was hoping you would say one of the things we can include would be such resources ..., but if they are not so important ...

Respondent: No they are ..., maybe I spoke of it in general. They are important but now maybe Section 21 Schools will be in a position to buy that but poor schools may not be able to afford such, unless if they start with full service schools. If full service schools benefit it means there will be a visually impairment section in the school.

Facilitator: The full service schools you are responsible for do they have learners who are visually impaired?

Respondent: I have recently been moved to a new position, but where I come from there were a few ..., it was mainly learners who had no spectacles ... - I feel I have to go back because we have the school health integrated programme, which deals with screening children from grade 1, sight and other things are checked, whatever challenges they get, they issue a referral letter immediately ..., they do it in order to combat whatever challenges that might contribute to the learner's development. But so far where I was I had never met a serious visual impairment, I can't remember placing any learner at a school for the visually impaired, mostly it would be ... (unclear)

Facilitator: What can be done for such learners in full service schools, especially for the visually impaired to help them out?

Respondent: Maybe, as I've indicated, the resources, and training for the educators with the different types of coloured paper, depending on your findings and optometrists, as you know the colours are different – they need to be made aware that if a child needs green and what is it that you need to follow etc., and/or enlarged print, some cases require enlarged print.

Facilitator: Okay, is the educator provided with the resources or does it have to go through some process?

Respondent: Yes it has to go through some process (CS) yes ...

Facilitator: Until it is returned back to you ...

Respondent: Yes ...

Facilitator: But then the recommendation?

Respondent: Yes for those learners that the teacher would have made recommendations, it is a medical report which has evidence that this is a challenge, this was recommended to the parent, the learner needs enlargement, the process is not very long, what is required is a recommendation to allow this so that exam section, they have a database, when question papers are developed, the exam section would know which schools require enlarged print for so many learners.

Facilitator: Okay, I hear you. So you've never work at Bartemeyer or Thibologo?

Respondent: I worked at Thibologa.

Facilitator: That's nice, we actually visiting them next month. I'm very interested to see what is going on ...

Respondent: One of the educators received an Excellence Award.

Facilitator: I did, they are doing well.

Respondent: If I have to choose where to go, up or down, and if you go down where do you want to go, I would choose to go to a special school.

Facilitator: Why though?

Respondent: To be honest, I am not bad mouthing other educators, for special schools, the educators are so committed, maybe this is one of the challenges I mentioned, the over-crowdedness which is a big challenge, teacher here ratio is ..., it's fun to be here, you can be creative and have enough time to attend to all learners ...

Facilitator: You have sufficient time to understand the learners because you do not have a lot of learners in your class ...

Respondent: Yes and they have assistants ...

Facilitator: Okay, that's nice, so you can give each and every one attention. Okay ..., so you would go back to school 14?

Respondent: With the greatest pleasure it's just that it is far away ..., like now I called ... (unclear), I have to call her again, MaJ ..., do you not have sign language in your school?

Facilitator: We do but it's not offered in my campus, and in most cases it is used for students ...

Respondent: I found it at Wits, I must go back to them ... (unclear) 5.7 10 sessions, but I will take it as my first step forward, I am contemplating to do the degree.

Facilitator: Okay, do come for this degree as well, visual impairment, it will be a year if you do it full time, two years part-time and thank you.

Respondent: Okay ...

END

APPENDIX G – STEP 2 ANALYSIS - POSTERS, FIELD NOTES AND REFLECTIVE NOTES-INITIAL CODES USING COLOUR CODES

School 9 (special needs school)		
INCLUSIVE EDUCATION: 1		
What does the policy say?	What are the implications for teachers?	
<ul style="list-style-type: none"> ❖ Every child has the right to education; ❖ Every child has the right to learn 	<ul style="list-style-type: none"> ❖ Educators are expected to teach learners with special needs: teachers were not trained on Braille, it is only now that the school is getting training; ❖ The teachers are now receiving Braille training ❖ Lack of relevant resources, both human and material ❖ Lack of support from the education authorities, the school believes that the Department of Education also lacks the necessary skills for learners with visual impairment. 	<ul style="list-style-type: none"> ❖ Equal opportunity ❖ Lack of training; ❖ resources and support

INCLUSIVE EDUCATION - 2

What does the policy say?

- ❖ According to the White Paper, all learners have the right to education irrespective of their disability;
- ❖ Diversity should be implemented.

What are the implications for teachers?

- ❖ No proper training for teachers
- ❖ LTSM
- ❖ Lack of support from health professionals;
- ❖ Barriers in learning
- ❖ Poor parental involvement

- ❖ Equal opportunity
- ❖ Inadequate training,
- ❖ lack of LTSM and support

INCLUSIVE EDUCATION: 3

What does policy say?

- ❖ It accommodates all learners with different disabilities;
- ❖ Learners should learn at their own pace;
- ❖ Learners should learn at their own pace considering their disabilities.

Implications for teachers

- ❖ The teacher will start by screening the learners;
- ❖ Identify resources available to help in teaching;
- ❖ Keep a record of learners;
- ❖ Follow-ups on learners' progress;
- ❖ Progress will determine whether the learner needs referral;

- ❖ Accommodate all learners, be supportive
- ❖ Implement SIAS, referral, commitment

- ❖ It requires a lot of commitment from the educator.

WHAT DO LEARNERS NEED? SCHOOL CONTENT - 1

WHAT CAN TEACHERS DO?

- ❖ We need to be flexible in the training we are offered;
- ❖ We must accept learners as they are.

WHAT DO LEARNERS NEED?

- ❖ **Learners need to be taught Braille**
- ❖ **They need brailled LTSM;**
- ❖ **They need proper mobility training;**
- ❖ **They need support to accept themselves;**
- ❖ **They need enough teaching and support staff;**
- ❖ **They need an inclusive learning environment.**

Learners:

- ❖ Braille skills,
- ❖ relevant LTSM,
- ❖ emotional support,
- ❖ human resource

Teachers:

- ❖ Flexible,
- ❖ emotionally supportive

WHAT DO LEARNERS NEED? SCHOOL CONTENT - 2

WHAT CAN TEACHERS DO?

- ❖ Love learners from the heart, make them feel loved;
- ❖ Support from educators;
- ❖ Teach from real life situation.

WHAT DO LEARNERS NEED

- ❖ **Lack of mobility;**
- ❖ **Partially sighted read with eyes instead of fingers;**
- ❖ Learner feel uncomfortable when blindfolded;
- ❖ Blind learners don't feel free to play;

Learners:

- ❖ Support

Teachers:

- ❖ Be supportive, be practical

- ❖ Over protection from home.

WHAT DO LEARNERS NEED? SCHOOL CONTENT - 3

WHAT CAN TEACHERS DO?

- ❖ No LTSM in the classroom;
- ❖ Not enough Brailers/no technicians;
- ❖ Learners struggle with some subjects due to their content;
- ❖ Learners need more individual attention during lessons;
- ❖ During breaks they need monitoring;
- ❖ **Mobility instructor who is full-time;**
- ❖ **Learn technology devices.**

WHAT DO LEARNERS NEED?

- ❖ **To learn Braille;**
- ❖ **Usage of other teaching aids,**
e.g. types of screening should be applied;
- ❖ **Have more techniques in teaching blind learners;**
- ❖ **Learn new technology devices.**

Learners:

- ❖ Braille and other resources/devices skills,
- ❖ teaching/learning strategies

Teachers:

- ❖ Using devices,
- ❖ support and monitor

WHAT DO TEACHERS NEED? – 1

KNOWLEDGE

- ❖ Braille
- ❖ Teaching and learning
- ❖ Classroom management
- ❖ Passion
- ❖ To know the learners
- ❖ O and M
- ❖ Music (as a stimulator)

SKILLS

- ❖ Reading
- ❖ Writing
- ❖ Assessment (SIAS)
- ❖ Basics of O and M e.g. pre-canes
- ❖ Sound recognition
- ❖ Coaching, e.g. sports etc,

RESOURCES

- ❖ Braille writer
- ❖ Apex
- ❖ Braille Board
- ❖ Pins
- ❖ Unified Braille book
- ❖ Braille LTSM
- ❖ e.g. DYMO tape, tape writer
- ❖ Braille devices, eg. Long canes

Knowledge and skills:

- ❖ Braille,
- ❖ teaching and learning strategies, classroom management,
- ❖ orientation and mobility,
- ❖ SIAS,
- ❖ extra mural activities

Resources:

- ❖ Material resources

- ❖ Music instruments

PROFESSIONAL DEVELOPMENT: HOW READY ARE WE?

0 10 -12-----15 0 -----6----- 1015 0 ---
 -----9--10 -----15

KNOWLEDGE SKILLS RESOURCES

WHAT DO TEACHERS NEED? – 2

KNOWLEDGE

SKILLS

RESOURCES

- | | | |
|---------------------|---|-------------------------|
| ❖ Qualified teacher | ❖ Know Braille | ❖ Braille machine |
| ❖ Teaching methods | ❖ Using of assistive devices, e.g. Apex | ❖ Types and slates |
| ❖ How to use: | ❖ Mobility | ❖ Apex |
| ❖ Concrete objects; | ❖ SDL hand work: | ❖ Embosser |
| ❖ Eye conditions | ❖ e.g. help those who are not gifted | ❖ Computer with jaws |
| ❖ Hand work | | ❖ LTSM |
| | | ❖ Braille books |
| | | ❖ Maps |
| | | ❖ Material for handwork |
| | | ❖ Human resources |

Knowledge and skills:

- ❖ Teaching strategies,
- ❖ using resources,
- ❖ eye condition

Resources:

- ❖ LTSM,
- ❖ material and human resources

PROFESSIONAL DEVELOPMENT: HOW READY ARE WE?

0 10 --12-----15 0 ----- 1013.....15 0 -
 -----10 ---11-----15

KNOWLEDGE SKILLS RESOURCES

WHAT SHOULD BE INCLUDED IN A POSTGRADUATE QUALIFICATION IN VISUAL IMPAIRMENT? - 1

- ❖ Braille;
- ❖ Orientation and mobility;
- ❖ Knowledge of eye diseases;

- ❖ Braille,
- ❖ orientation and mobility,
- ❖ eye condition,

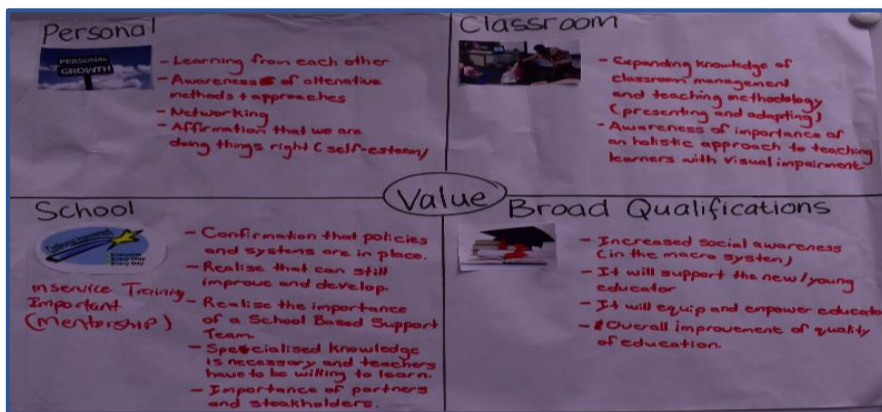
- ❖ Basic skills of:
 - Music;
 - Handwork;
 - Sports;
 - Dance;
 - Skills for daily living;
- ❖ Methodology/approach of teaching the visually impaired;
- ❖ Practical experience

DREAM BIG

WHAT SHOULD BE INCLUDED IN A POSTGRADUATE QUALIFICATION IN VISUAL IMPAIRMENT? – 2

Special curriculum:

- ❖ Knowledge, teaching and learning;
- ❖ Skills;
- ❖ Braille; and M;
- ❖ SDL (skills for daily living);
- ❖ Low vision;
- ❖ Assistive devices;
- ❖ History of Braille (6 dots);
- ❖ Hand working e.g. cane, knitting etc.;
- ❖ Music and Sports;
- ❖ Creative arts.



- ❖ extra mural activities,
- ❖ ADL,
- ❖ teaching strategies,
- ❖ practicals

- ❖ Teaching and learning strategies,
- ❖ ADLs,
- ❖ Braille,
- ❖ orientation and mobility,
- ❖ devices and resources,
- ❖ extra mural activities

PRA contribution

- ❖ Peer learning
- ❖ Improvement
- ❖ Knowledge expansion
- ❖ Empowerment
- ❖ Awareness



❖ PRA allows for discussions

FN-OBSERVATION SCHEDULE FOR UNOBTRUSIVE CLASSROOM OBSERVATION

Information about class observed: School 9 (special needs school)

Grade of learners:	6
Number of learners in class:	15
Number of functionally blind learners:	9
Number of learners with low vision:	
Lesson observed:	Maths (fractions)

Classroom walls: Are classroom aids on walls accessible/adapted? Describe/photos.

Clean with same Rand Water poster class time table and duty list and world map.

Field notes on classroom atmosphere/culture, teacher behaviour, learner involvement, differentiation:

Teacher opened curtains on one side and one learner, closed them. Learners are quiet and listening attentively only speaks when spoken to. Each learner is sitting with a Braille machine. One albino. Teacher explaining instructions about twice and asked if they understand, they seem to understand as they give correct answers.

- ❖ Availability of curtains and Braille machines
- ❖ Repetition

Adaptations:

Environmental adaptations:	
Lighting: Learners seated according to individual lighting needs. Table lamps?	No table lights but curtains.
Desk space: Enough space for material/supporting tools?	Yes
Classroom space: Can the learners move around freely without bumping into obstacles?	Yes
External noises: Any noise distracting learners from listening to the lesson?	Grass mowing was taking place which was disturbing.
Technology for academic areas: Highlight aids in use.	
Reading aids:	
Writing:	High contrast pen, portable word processing device, typing with audio support, Braillewriter, voice

	<p>recognition, bold-line paper, raised line paper</p> <p>Other: Only Braille machine, no black/white or any writing board.</p>	
Math	<p>Large print measuring tools (rulers, protractors), large key calculator tactile measuring devices, abacus, talking calculator, models or 2D & 3D geometric shapes.</p> <p>Other: Today's lesson is fractions, so she's explaining looking from the textbook.</p>	
Pictorial information	<p>Enlarged format. CCTV, models or objects, tactile graphics, tactile-audio graphics</p> <p>Other:</p>	
Note-taking	<p>Slate and stylus, tape or digital recording device, computer-based recording software, electronic Braille notetaker</p> <p>Other:</p> <p>Learners are just listening not taking notes.</p>	
Computer access	<p>Large operating system features, built-in Magnification, magnification with screen reader, screen reader, screen reader with Braille device, large print keyboard stickers, Braille keyboard stickers</p> <p>Other:</p>	
Low-tech, self-made adaptations/learning aids		
Assessment	<p>Monitoring and make adjustments for visual fatigue</p> <p>Modification of length of assignments, tests, exams</p> <p>Extended time for assignments, tests, exams</p> <p>Test items explained or paraphrased as needed</p> <p>Amenuensis</p> <p>Access to notes/text/learning materials such as tactiles/manipulatives during tests, exams</p> <p>Other:</p>	

Please mention any other aids not on this list.

Shaded – how do learners know? Learners are wearing jeans in school, shoes with school shirts and jerseys. Learners are taught to do () with their hands.

Arrival at **School 9 (special needs school)**
for the blind- 08:30

Its catholic, very neat and organised;

Very warm by principal and HOD of foundation phase;

We further explained our visit to the principal and she explained that she has to go to another school for SGB elections but will be in good hands;

Lunch issue was discussed and conclusion was to drive to Lebowakgomo;

Observation took place in Grade 6- see observation schedule-one interesting observation though* **low vision and blind learners are all in one class with all using braille machines.**

PRA- Based workshop 1 started at one o'clock.

Teachers are quite hesitant and seem to wonder what is going on until one of them started a song, they all joined in and one of them prayed, the principal took over to introduce us;

We then explained the purpose of our visit;

Observed some resistance to sign consent letter and divide into groups;

As we went to the second poster participants mentioned that they **never received training on IE** and they are battling to respond to some questions, so we went to the posters about VI;

Lunch was served after the day;

15 attended, 1 had to go to a workshop however the principal said she'll be there tomorrow;

In the end 1 male educator mentioned that this felt like a **team building** which they hadn't had in a such a long time while **they learn from each other;;**

The principal also added that it was good **to socialise** and learn in a different setting than a normal staff meeting.

RJ-The principal welcomed us heartily. She introduced us to the management of the school, namely the HOD and other staff. We were allowed to do class observations. I was supposed to do one but ended up doing 2 because I was informed of a special class and requested permission to observe it. The learners in this particular class are not only blind but they need special care in terms of, for example some cannot use their hands and some needed remedial care. **The**

❖ **Teaching strategies needed**

❖ **Early preparation**

❖ **IE knowledge needed**

❖ **PRA allowed for peer learning and socialise**

educators train their hands by giving them tasks which force them to use their hands. They were creating something using wool.

I was humbled by the patience of the educators, particularly the teacher in the special class who was also blind. She had an assistant, she participated in the lesson. There was also another visiting teacher who is slowly becoming blind, she was visiting the school to learn Braille. The three educators also informed me that the learners condition humbled them too. All they want to do is to give them learners love.

Overall the educators worked well with us without showing any sign of wanting to go home or rushing elsewhere.

In terms of time, they kept to the times as requested.

The school is lacking in terms of Braille machines, half the class can work on the machines the other half the teacher must ensure that the learners are kept busy. The school keeps a lot of toys for this reason.

The school is very clean and so are the facilities, I just couldn't fault the school in anything. In terms of maths materials/teaching aids, they do have, I believe the challenge the educators are having is with the learners themselves, it will take time for the learners to get to the stage of doing maths.

Interview - Initial codes using colour codes

15- Grade 10-12 Tourism Teacher from school for the Blind and partially sighted

Facilitator: once more thank you for your time, uhmm can you briefly please elaborate to us the qualifications that you have?

Respondent: Alright ehh I have a qualification of bachelor in tourism and postgraduate certificate in education

Facilitator: and your job here, your line of work, what are you doing at the school specifically, are you teaching, what grade?

Respondent: okay uhmm I'm an educator for grade 10 tourism class and grade 11 also tourism as well as grade 12 tourism and also LO grade 10 and 11, that is what I am teaching

Facilitator: okay, how many visually impaired learners are in your class?

Respondent: mmmmm I'm not sure on the stats because our learners keep coming now because of this thing changing classes but I can say in grade 10 both the total blinds and those who got a little bit of vision, we've got about 15 ja both the blinds and visually impaired 15 and then we've got grade 11 we have 2 total

- ❖ Accommodation,
- ❖ available human and material resources
- ❖ School as training resource centre
- ❖ perceived passion

- ❖ Shortage of Braille machines
- ❖ Resources available

- ❖ No VI qualification

blinds and then who have sight about 5 and then grade 12 is 2 total blinds as well and also 5 of those who got a little bit of vision. For LO we don't have those vision problems its only the deafs.

Facilitator: Oh okay, in your opinion what do you think are the needs of these learners, those who are blind and those with low vision?

Respondent: In my opinion I would say in terms of the material?

Facilitator: Scholastically, socially?

Respondent: Oh okay, first of when you look at our school our environment is a challenge when it comes to books, a very very big challenge. **We've got a challenge with books** basically and that delays the teaching and learning process because most of the time as a teacher I need to start by making notes, scanning the textbook, editing it and then brailleing notes for them and that takes time, other times I have to leave them in class and do that so it delays the syllabus basically and the covering up, so books are very very important we need braille books. And another thing is of course **braille machines**, braille machines are a big problem as well to the extent maybe 5 learners using one machine sometimes or even 2 or 3 of them so swapping like that, so you hardly find a learner coming to class with their own machine so its one of the situations that you have learners in class and as you are about to give work they stand up 'I'm going to fetch machine I'm going to fetch a machine' and that is waste of time so thinking of course if each can have their own it will even save us time so braille machines are very very important as well. And uhm another challenge that I see is normally with new ones coming to school uhm sometimes you find that the learner takes a long time to get to know the place actually yes they do give them **orientation** but you find that the time they came to school gave them orientation only once or twice but it becomes difficult for that to know their whereabouts around the school so you find them most of the time I have seen it with others the learner will be getting lost for the whole six months, getting lost around the school not knowing where to go during changing of subjects because at our school what we do at the end of each period the learners go to teachers we don't go there so it becomes a challenge I see with others but eventually at the end they get to know the place but at first it becomes a bit of a challenge.

Facilitator: and emotionally and socially, what do you think they need?

Respondent: uhhh emotionally and socially I just think some, at least the number is not that high, there are just some that you get to realise other times when you are in class with them that this learner has got maybe some things that are, especially with the disability they have not accepted and other times you find that as a teacher you want to give an example with a disability or you want to give an

Learners' needs:

- ❖ Brailled books
- ❖ Braille machines
- ❖ O and M

example with them but not a very sensitive example but you find that, you see that the learner is not really comfortable and I think some of them are still struggling when it comes to that and more especially those who become blind along the way but for those who are born blind I realised that they have accepted they are open to talk about their disability.

Facilitator: Okay, do you guys have pace-setters as the mainstream schools, in terms of you finishing certain curriculum tasks?

Respondent: Yes we have pace-setters, the unfortunate part is that the pace-setter is same as that one of mainstream so we need to work at the pace as the mainstream which is sometimes actually all the time highly impossible

Facilitator: Do you view as a challenge to you as teacher?

Respondent: Yes it's a challenge we tried to work on it but its really really challenging, in other times when you make sure that you really really want to finish you find that other things you're teaching you're going on a pace that is very fast and you can see that the learners are not understanding and that is not doing any good actually its just for you to cover the pace so that when the facilitator come you can show them that we've done this but you know very well as a teacher that my learners don't know this or are satisfied

Facilitator: Other challenges that you are experiencing while teaching and supporting learners with visual impairment?

Respondent: Uhhmmm other challenges, I would say specifically in my subject, tourism some of the challenges that I have especially to do with the material we need, tangible things such as your map it becomes a challenge, you can see the map that I'm having here on the wall is difficult for the blind learner, I'm speaking of Brazil they won't know where Brazil is so it really really a challenge, other times I was talking about brochures I need to tell them what a brochure is what is contained in a brochure so its also a challenge I'll try really hard to explain but we don't have enough of those material that can be really useful for them so I think as time goes on we really need that we need those material to help them understand more

Facilitator: What are the competencies that you have that enables you to work better with them?

Respondent: I would say, especially linking it with what we said now about challenges, I think I try really really hard to an extent that even if it will take the time that I'll be using covering the pace-setter I try so hard to make sure that learners

❖ Acceptance/emotional support

❖ Curriculum as barrier

❖ Curriculum as barrier

❖ Inadequate material resources/LTSM

Competencies:

❖ Teacher's commitment and hard work

understand what I am trying to describe even if we talk about the maps it does not matter if it will take me the whole period but if I need to explain something to a blind learner to **make sure that they understand** I'll understand even if it takes the whole hour I'll do that so I think that is something that **I'm really really trying so hard** I'm getting there I'm not there yet but I'm getting there to explain to the extent where the learner is clear with what I'm explaining

Facilitator: In your PGCE, you did say you have a PGCE right, what are you specialising in?

Respondent: In my PGCE I'm specialising in economics and EMS

Facilitator: So you don't have any qualification or I don't know how to put it well let's say qualification in special needs?

Respondent: No I don't

Facilitator: Where I want to go is, everything that you have learned here you've learned through experience?

Respondent: Yes, experience and interest and that **passion**, it's the **passion** that kept on pushing me to get this far

(Disrupted by a knock)

Facilitator: (whispers: okay let's pause) you were talking about your experience, it taught you most of the things you know?

Respondent: Yes, uhmm I think it started with me having an interest in.. specifically with me it started with sign language to be honest so having an interest in that department and then I even decided when I was doing my PGCE to say I want to teach at school for learners with disabilities and then I started by learning sign language and then from there on being around the environment I discovered that oh there are also blind students and then it also pushed me to learning Braille. I remember when I came to the school here for the interview they asked me if I had any knowledge in Braille but then I said I have knowledge your letters your abc and what not but I'm willing to learn but for real I was willing to learn because up to now I can say I'm not really yet there but I'm getting there, I've got grade 2 Braille now so I can say yes I'm getting there

Facilitator: Okay, but with the skills that you have learned through experience do you think its necessary for somebody to go through training?

Respondent: I think it is very necessary, even with me right now though I got experience through teaching around here but I still believe that **I need training, I**

❖ **Qualification not on VI, SE or IE**

❖ **Commitment and passion**

❖ **Training needed**

still believe that I need formal training yes so ja its very very necessary for one to get training

Facilitator: At which level do you think that training should be offered, undergraduate postgraduate?

Respondent: Mmmm I think it can differ I don't know how you get to assess us but I know there are some of us who have little knowledge when it comes to the braille and the sign language and some are of course on the grade 1 and 2 so maybe I don't know how you assess them but I think those who have grade 1 and 2 and those are confident enough because it also goes with the confidence I believe they can be on the postgraduate level and others on the undergraduate

❖ Training required on both levels

Facilitator: So it depends on the readiness?

Respondent: Yes, absolutely

Facilitator: Uhhh I just to go back to what you were saying for example teaching a map that its very difficult you have explain, I just want to know something like a map how you go about teaching a blind learner specifically to sort of understand what it is that you're actually talking about?

Respondent: You mean in the sense where we do not have the right material?

Facilitator: Yes

Respondent: Well firstly you start by explaining by all means by starting with where they are as in like South Africa where they are then trying show them in South Africa where we are, are next to the sea we are next to which country and then on right is which country on your left is which one on top at the south where is what so that's what you do to try explain to them, other times you can explain by going to the learner saying you being here is South Africa so at the bottom of your legs is that at the right of your arm is that at the shoulder, you do that you just try by all means to make them understanding and show them that maybe the shape of your head (touching left cheek down to chin) is SA, your shoulder is Brazil that's how you will explain it you just try by all means to make sure that they get it and luckily they do get it at the end of the day, they do

❖ Using what is available

Facilitator: Uhhh okay sure, now we are moving to inclusive education, how best do you think it can be implemented?

Respondent: Mhm this one...

Facilitator: Or maybe let's say do you see the relevance of it your school?

Respondent: uhhh do I see the relevance of IE in this school uhhh

Facilitator: Specifically for the subjects you are teaching?

Respondent: Alright uhhhh let's say specifically on the subjects I am teaching, well I believe IE is important of course although in the subject that I'm teaching it's possible bit it's not easy especially for learners with visual impairment it's possible but it's not easy especially looking at the fact that with tourism let's say the learner is studying tourism and they develop an interest and passion at the end of the day or at the end of concluding their studies they want to work in a tourism environment so it limits them a lot to an extent that let's say for an example they want to work at a game reserve and they specifically want to be tour guide it won't be easy to be honest because they will need to see animals to say 'ladies and gentlemen over there's an elephant' so that for a learner with visual impairment cannot be easy but yes they can still work in the tourism industry or department where they will not deal with anything that requires their vision so they can still do that so ja it can happen but it's not that easy

Facilitator: As much as it not easy, I hear you the way you explain it for learners who are visually impaired especially when they are going to the workplace it might not necessarily be possible to do what they might want, but in terms of the requirements, I don't know have you received training on IE from department of education or anyone?

Respondent: Mmm maybe it was offered and I was never part of it I don't remember receiving such

Facilitator: But do you think you need such?

Respondent: **Definitely, we need that**

Facilitator: Will it help you implement it a lot better?

Respondent: I believe so, I believe so

Facilitator: Okay and lastly, as we said that we are developing a qualification in visual impairment studies, what do you think is necessary to be included, if you were one of us developing such a qualification what would you like teachers to know before they can stand in front of a class of learners who are visually impaired?

Respondent: Uhhh I think what is important for teachers to know is that as much as you can have learners with visual impairment in class but you should still know that **their needs** are different specifically on education, on **the material that they deserve for them to learn better** for example other times you find that you have learner requiring an A3 material and then you as a teacher when you see that the

❖ **Difficulty of implementing IE**

❖ **IE training needed**

Qualification:

- ❖ **LVI needs and support**
- ❖ **SIAS**
- ❖ **collaboration**
- ❖ **eye conditions**
- ❖ **VI and causes**

learner can see where you are seating you conclude that they can see and therefore need an A4 material so I think that is very important for us to be taught that, as much as we are not specialising in that department we cannot conclude that the learner can see me therefore they can see. We just need to be taught how to be able to identify that or maybe or to leave it to those who specialise in it for example at our school we have those working at the OT department I think they are the ones who specialise in this, I think we can learn from them

Facilitator: Okay, anything else that you think is necessary?

Respondent: Uhhmmm another thing would knowing different eye conditions even though we don't go too deep into it as teachers, even now I'm so clueless I just hear a learner is blind but I don't know whats happening what condition is causing the eye to be like that, maybe just having a little bit of information about the dangers that can cause them to have the disability because some of them might be caused by the environment or things we are doing, like yesterday somebody was doing a presentation about writing on a coloured paper for a blind learners when you write on a pink paper the learner won't see anything you need to use a black marker so I think some of these are the ones that cause our learners to lose the vision even more so that is important to really learn not make the kids' disability even more but use the right things on them

Facilitator: I'd like thank you so much for your time

Respondent: You are welcome

APPENDIX H – STEP 3 ANALYSIS - PULLING TOGETHER CODES INTO POTENTIAL THEMES USING NUMBERS

APPENDIX I – STEP 4 ANALYSIS

1 Yellow – Learners’ needs

School 9 (special needs school)		
INCLUSIVE EDUCATION: 1		
What does the policy say?	What are the implications for teachers?	
<ul style="list-style-type: none"> ❖ Every child has the right to education; ❖ Every child has the right to learn 	<ul style="list-style-type: none"> ❖ Educators are expected to teach learners with special needs: teachers were not trained on Braille, it is only now that the school is getting training; ❖ The teachers are now receiving Braille training ❖ Lack of relevant resources, both human and material ❖ Lack of support from the education authorities, the school believes that the Department of Education also lacks the necessary skills for learners with visual impairment. 	<ul style="list-style-type: none"> ❖ Equal opportunity 5 ❖ Lack of training; 6 ❖ resources and support 6

INCLUSIVE EDUCATION - 2

What does the policy say?

- ❖ According to the White Paper, all learners have the right to education irrespective of their disability;
- ❖ Diversity should be implemented.

What are the implications for teachers?

- ❖ No proper training for teachers
- ❖ LTSM
- ❖ Lack of support from health professionals;
- ❖ Barriers in learning
- ❖ Poor parental involvement

- ❖ Equal opportunity 5
- ❖ Inadequate training, 6
- ❖ lack of LTSM and support 6

INCLUSIVE EDUCATION: 3

What does policy say?

- ❖ It accommodates all learners with different disabilities;
- ❖ Learners should learn at their own pace;
- ❖ Learners should learn at their own pace considering their disabilities.

Implications for teachers

- ❖ The teacher will start by screening the learners;
- ❖ Identify resources available to help in teaching;
- ❖ Keep a record of learners;
- ❖ Follow-ups on learners' progress;
- ❖ Progress will determine whether the learner needs referral;

- ❖ Accommodate all learners, 5
- ❖ be supportive 5
- ❖ Implement SIAS, 6
- ❖ referral, 6
- ❖ commitment 6

- ❖ It requires a lot of commitment from the educator.

WHAT DO LEARNERS NEED? SCHOOL CONTENT - 1

WHAT CAN TEACHERS DO?

- ❖ We need to be flexible in the training we are offered;
- ❖ We must accept learners as they are.

WHAT DO LEARNERS NEED?

- ❖ **Learners need to be taught Braille**
- ❖ **They need brailled LTSM;**
- ❖ **They need proper mobility training;**
- ❖ **They need support to accept themselves;**
- ❖ **They need enough teaching and support staff;**
- ❖ **They need an inclusive learning environment.**

Learners:

- ❖ Braille skills, 1
- ❖ relevant LTSM, 1
- ❖ emotional support, 1
- ❖ human resource¹

Teachers:

- ❖ Flexible, 2
- ❖ emotionally supportive²

WHAT DO LEARNERS NEED? SCHOOL CONTENT - 2

WHAT CAN TEACHERS DO?

- ❖ Love learners from the heart, make them feel loved;
- ❖ Support from educators;
- ❖ Teach from real life situation.

WHAT DO LEARNERS NEED

- ❖ **Lack of mobility;**
- ❖ **Partially sighted read with eyes instead of fingers;**
- ❖ Learner feel uncomfortable when blindfolded;
- ❖ Blind learners don't feel free to play;

Learners:

- ❖ Support¹

Teachers:

- ❖ Be supportive, 2
- ❖ be practical 2

- ❖ Over protection from home.

WHAT DO LEARNERS NEED? SCHOOL CONTENT - 3

WHAT CAN TEACHERS DO?

- ❖ No LTSM in the classroom;
- ❖ Not enough Brailers/no technicians;
- ❖ Learners struggle with some subjects due to their content;
- ❖ Learners need more individual attention during lessons;
- ❖ During breaks they need monitoring;
- ❖ **Mobility instructor who is full-time;**
- ❖ **Learn technology devices.**

WHAT DO LEARNERS NEED?

- ❖ **To learn Braille;**
- ❖ **Usage of other teaching aids,**
e.g. types of screening should be applied;
- ❖ **Have more techniques in teaching blind learners;**
- ❖ **Learn new technology devices.**

Learners:

- ❖ Braille and other resources/devices skills,1
- ❖ teaching/learning strategies1

Teachers:

- ❖ Using devices, 2
- ❖ support and monitor 2

WHAT DO TEACHERS NEED? – 1

KNOWLEDGE

- ❖ Braille
- ❖ Teaching and learning
- ❖ Classroom management
- ❖ Passion
- ❖ To know the learners
- ❖ O and M
- ❖ Music (as a stimulator)

SKILLS

- ❖ Reading
- ❖ Writing
- ❖ Assessment (SIAS)
- ❖ Basics of O and M e.g. pre-canes
- ❖ Sound recognition
- ❖ Coaching, e.g. sports etc,

RESOURCES

- ❖ Braille writer
- ❖ Apex
- ❖ Braille Board
- ❖ Pins
- ❖ Unified Braille book
- ❖ Braille LTSM
- ❖ e.g. DYMO tape, tape writer
- ❖ Braille devices, eg. Long canes

Knowledge and skills:

- ❖ Braille, 3
- ❖ teaching and learning strategies, classroom management, 3
- ❖ orientation and mobility, 3
- ❖ SIAS, 3
- ❖ extra mural activities 3

Resources:

- ❖ Material resources3

- ❖ Music instruments

PROFESSIONAL DEVELOPMENT: HOW READY ARE WE?

0 10 -12-----15 0 -----6----- 1015 0 ---
 -----9--10 -----15

KNOWLEDGE SKILLS RESOURCES

WHAT DO TEACHERS NEED? – 2

KNOWLEDGE

SKILLS

RESOURCES

- | | | |
|---------------------|---|-------------------------|
| ❖ Qualified teacher | ❖ Know Braille | ❖ Braille machine |
| ❖ Teaching methods | ❖ Using of assistive devices, e.g. Apex | ❖ Types and slates |
| ❖ How to use: | ❖ Mobility | ❖ Apex |
| ❖ Concrete objects; | ❖ SDL hand work: | ❖ Embosser |
| ❖ Eye conditions | ❖ e.g. help those who are not gifted | ❖ Computer with jaws |
| ❖ Hand work | | ❖ LTSM |
| | | ❖ Braille books |
| | | ❖ Maps |
| | | ❖ Material for handwork |
| | | ❖ Human resources |

PROFESSIONAL DEVELOPMENT: HOW READY ARE WE?

0 10 --12-----15 0 ----- 1013.....15 0 -
 -----10 ---11-----15

KNOWLEDGE SKILLS RESOURCES

WHAT SHOULD BE INCLUDED IN A POSTGRADUATE QUALIFICATION IN VISUAL IMPAIRMENT? - 1

- ❖ Braille;
- ❖ Orientation and mobility;
- ❖ Knowledge of eye diseases;

Knowledge and skills:

- ❖ Teaching strategies, 3
- ❖ using resources, 3
- ❖ eye condition, 3

Resources:

- ❖ LTSM, 3
- ❖ material and human resources, 3

- ❖ Braille, 4
- ❖ orientation and mobility, 4
- ❖ eye condition, 4

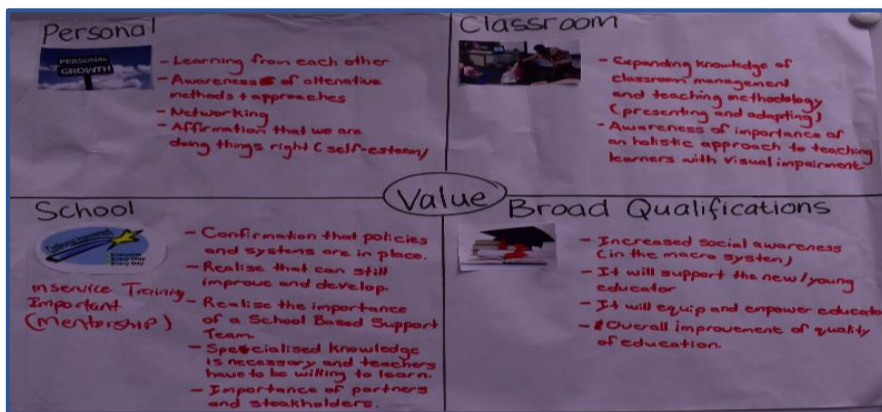
- ❖ Basic skills of:
 - Music;
 - Handwork;
 - Sports;
 - Dance;
 - Skills for daily living;
- ❖ Methodology/approach of teaching the visually impaired;
- ❖ Practical experience

DREAM BIG

WHAT SHOULD BE INCLUDED IN A POSTGRADUATE QUALIFICATION IN VISUAL IMPAIRMENT? – 2

Special curriculum:

- ❖ Knowledge, teaching and learning;
- ❖ Skills;
- ❖ Braille; and M;
- ❖ SDL (skills for daily living);
- ❖ Low vision;
- ❖ Assistive devices;
- ❖ History of Braille (6 dots);
- ❖ Hand working e.g. cane, knitting etc.;
- ❖ Music and Sports;
- ❖ Creative arts.



- ❖ extra mural activities, 4
- ❖ ADL, 4
- ❖ teaching strategies, 4
- ❖ practicals 4

- ❖ Teaching and learning strategies, 4
- ❖ ADLs, 4
- ❖ Braille, 4
- ❖ orientation and mobility, 4
- ❖ devices and resources, 4
- ❖ extra mural activities 4

PRA contribution

- ❖ Peer learning
- ❖ Improvement
- ❖ Knowledge expansion
- ❖ Empowerment
- ❖ Awareness 12



❖ PRA allows for discussions 11

FN-OBSERVATION SCHEDULE FOR UNOBTRUSIVE CLASSROOM OBSERVATION

Information about class observed: School 9 (special needs school)

Grade of learners:	6
Number of learners in class:	15
Number of functionally blind learners:	9
Number of learners with low vision:	
Lesson observed:	Maths (fractions)

Classroom walls: Are classroom aids on walls accessible/adapted? Describe/photos.

Clean with same Rand Water poster class time table and duty list and world map.

Field notes on classroom atmosphere/culture, teacher behaviour, learner involvement, differentiation:

Teacher opened curtains on one side and one learner, closed them. Learners are quiet and listening attentively only speaks when spoken to. Each learner is sitting with a Braille machine. One albino. Teacher explaining instructions about twice and asked if they understand, they seem to understand as they give correct answers.

- ❖ Availability of curtains and Braille machines, 10
- ❖ Repetition 2

Adaptations:

Environmental adaptations:	
Lighting: Learners seated according to individual lighting needs. Table lamps?	No table lights but curtains.
Desk space: Enough space for material/supporting tools?	Yes
Classroom space: Can the learners move around freely without bumping into obstacles?	Yes
External noises: Any noise distracting learners from listening to the lesson?	Grass mowing was taking place which was disturbing.
Technology for academic areas: Highlight aids in use.	
Reading aids:	
Writing:	High contrast pen, portable word processing device, typing with audio support, Braillewriter, voice

	<p>recognition, bold-line paper, raised line paper</p> <p>Other: Only Braille machine, no black/white or any writing board.</p>	
Math	<p>Large print measuring tools (rulers, protractors), large key calculator tactile measuring devices, abacus, talking calculator, models or 2D & 3D geometric shapes.</p> <p>Other: Today's lesson is fractions, so she's explaining looking from the textbook.</p>	
Pictorial information	<p>Enlarged format. CCTV, models or objects, tactile graphics, tactile-audio graphics</p> <p>Other:</p>	
Note-taking	<p>Slate and stylus, tape or digital recording device, computer-based recording software, electronic Braille notetaker</p> <p>Other:</p> <p>Learners are just listening not taking notes.</p>	
Computer access	<p>Large operating system features, built-in Magnification, magnification with screen reader, screen reader, screen reader with Braille device, large print keyboard stickers, Braille keyboard stickers</p> <p>Other:</p>	
Low-tech, self-made adaptations/learning aids		
Assessment	<p>Monitoring and make adjustments for visual fatigue</p> <p>Modification of length of assignments, tests, exams</p> <p>Extended time for assignments, tests, exams</p> <p>Test items explained or paraphrased as needed</p> <p>Amenuensis</p> <p>Access to notes/text/learning materials such as tactiles/manipulatives during tests, exams</p> <p>Other:</p>	

Please mention any other aids not on this list.

Shaded – how do learners know? Learners are wearing jeans in school, shoes with school shirts and jerseys. Learners are taught to do () with their hands.

Arrival at **School 9 (special needs school)**
for the blind- 08:30

Its catholic, very neat and organised;

Very warm by principal and HOD of foundation phase;

We further explained our visit to the principal and she explained that she has to go to another school for SGB elections but will be in good hands;

Lunch issue was discussed and conclusion was to drive to Lebowakgomo;

Observation took place in Grade 6- see observation schedule-one interesting observation though* **low vision and blind learners are all in one class with all using braille machines.**

PRA- Based workshop 1 started at one o'clock.

Teachers are quite hesitant and seem to wonder what is going on until one of them started a song, they all joined in and one of them prayed, the principal took over to introduce us;

We then explained the purpose of our visit;

Observed some resistance to sign consent letter and divide into groups;

As we went to the second poster participants mentioned that they **never received training on IE** and they are battling to respond to some questions, so we went to the posters about VI;

Lunch was served after the day;

15 attended, 1 had to go to a workshop however the principal said she'll be there tomorrow;

In the end 1 male educator mentioned that this felt like a **team building** which they hadn't had in a such a long time while **they learn from each other;;**

The principal also added that it was good **to socialise** and learn in a different setting than a normal staff meeting.

RJ-The principal welcomed us heartily. She introduced us to the management of the school, namely the HOD and other staff. We were allowed to do class observations. I was supposed to do one but ended up doing 2 because I was informed of a special class and requested permission to observe it. The learners in this particular class are not only blind but they need special care in terms of, for example some cannot use their hands and some needed remedial care. **The**

❖ **Teaching strategies needed**
3

❖ **Early preparation** 2

❖ **IE knowledge needed** 3

❖ **PRA allowed for peer learning and socialise** 12

educators train their hands by giving them tasks which force them to use their hands. They were creating something using wool.

I was humbled by the patience of the educators, particularly the teacher in the special class who was also blind. She had an assistant, she participated in the lesson. There was also another visiting teacher who is slowly becoming blind, she was visiting the school to learn Braille. The three educators also informed me that the learners condition humbled them too. All they want to do is to give them learners love.

Overall the educators worked well with us without showing any sign of wanting to go home or rushing elsewhere.

In terms of time, they kept to the times as requested.

The school is lacking in terms of Braille machines, half the class can work on the machines the other half the teacher must ensure that the learners are kept busy. The school keeps a lot of toys for this reason.

The school is very clean and so are the facilities, I just couldn't fault the school in anything. In terms of maths materials/teaching aids, they do have, I believe the challenge the educators are having is with the learners themselves, it will take time for the learners to get to the stage of doing maths.

Interview - Initial codes using colour codes

15- Grade 10-12 Tourism Teacher from school for the Blind and partially sighted

Facilitator: once more thank you for your time, uhmm can you briefly please elaborate to us the qualifications that you have?

Respondent: Alright ehh I have a qualification of bachelor in tourism and postgraduate certificate in education

Facilitator: and your job here, your line of work, what are you doing at the school specifically, are you teaching, what grade?

Respondent: okay uhmm I'm an educator for grade 10 tourism class and grade 11 also tourism as well as grade 12 tourism and also LO grade 10 and 11, that is what I am teaching

Facilitator: okay, how many visually impaired learners are in your class?

Respondent: mmmmm I'm not sure on the stats because our learners keep coming now because of this thing changing classes but I can say in grade 10 both the total blinds and those who got a little bit of vision, we've got about 15 ja both the blinds and visually impaired 15 and then we've got grade 11 we have 2 total

- ❖ Accommodation, 2
- ❖ available human and material resources 10
- ❖ School as training resource centre 10
- ❖ perceived passion 2

- ❖ Shortage of Braille machines 3
- ❖ Resources available 10

- ❖ No VI qualification 8

blinds and then who have sight about 5 and then grade 12 is 2 total blinds as well and also 5 of those who got a little bit of vision. For LO we don't have those vision problems its only the deaf.

Facilitator: Oh okay, in your opinion what do you think are the needs of these learners, those who are blind and those with low vision?

Respondent: In my opinion I would say in terms of the material?

Facilitator: Scholastically, socially?

Respondent: Oh okay, first of when you look at our school our environment is a challenge when it comes to books, a very very big challenge. **We've got a challenge with books** basically and that delays the teaching and learning process because most of the time as a teacher I need to start by making notes, scanning the textbook, editing it and then braille notes for them and that takes time, other times I have to leave them in class and do that so it delays the syllabus basically and the covering up, so books are very very important we need braille books. And another thing is of course **braille machines**, braille machines are a big problem as well to the extent maybe 5 learners using one machine sometimes or even 2 or 3 of them so swapping like that, so you hardly find a learner coming to class with their own machine so its one of the situations that you have learners in class and as you are about to give work they stand up 'I'm going to fetch machine I'm going to fetch a machine' and that is waste of time so thinking of course if each can have their own it will even save us time so braille machines are very very important as well. And uhm another challenge that I see is normally with new ones coming to school uhm sometimes you find that the learner takes a long time to get to know the place actually yes they do give them **orientation** but you find that the time they came to school gave them orientation only once or twice but it becomes difficult for that to know their whereabouts around the school so you find them most of the time I have seen it with others the learner will be getting lost for the whole six months, getting lost around the school not knowing where to go during changing of subjects because at our school what we do at the end of each period the learners go to teachers we don't go there so it becomes a challenge I see with others but eventually at the end they get to know the place but at first it becomes a bit of a challenge.

Facilitator: and emotionally and socially, what do you think they need?

Respondent: uhhh emotionally and socially I just think some, at least the number is not that high, there are just some that you get to realise other times when you are in class with them that this learner has got maybe some things that are, especially with the disability they have not accepted and other times you find that as a teacher you want to give an example with a disability or you want to give an

Learners' needs:

- ❖ **Brailled books** 1
- ❖ **Braille machines** 1
- ❖ **O and M** 1

example with them but not a very sensitive example but you find that, you see that the **learner is not really comfortable** and I think some of them are still struggling when it comes to that and more especially those who become blind along the way but for those who are born blind I realised that they have accepted they are open to talk about their disability.

Facilitator: Okay, do you guys have pace-setters as the mainstream schools, in terms of you finishing certain curriculum tasks?

Respondent: Yes we have **pace-setters**, the unfortunate part is that the pace-setter is same as that one of mainstream so we need to work at the pace as the mainstream which is sometimes actually all the time highly impossible

Facilitator: Do you view as a challenge to you as teacher?

Respondent: Yes it's a challenge we tried to work on it but its really really challenging, in **other times when you make sure that you really really want to finish you find that other things you're teaching you're going on a pace that is very fast and you can see that the learners are not understanding** and that is not doing any good actually its just for you to cover the pace so that when the facilitator come you can show them that we've done this but you know very well as a teacher that my learners don't know this or are satisfied

Facilitator: Other challenges that you are experiencing while teaching and supporting learners with visual impairment?

Respondent: Uhhmmm other challenges, I would say specifically in my subject, tourism some of the challenges that I have especially to do with **the material we need, tangible things** such as your map it becomes a challenge, you can see the map that I'm having here on the wall is difficult for the blind learner, I'm speaking of Brazil they won't know where Brazil is so it really really a challenge, other times I was talking about brochures I need to tell them what a brochure is what is contained in a brochure so its also a challenge I'll try really hard to explain but we don't have enough of those material that can be really useful for them so I think as time goes on we really need that we need those material to help them understand more

Facilitator: What are the competencies that you have that enables you to work better with them?

Respondent: I would say, especially linking it with what we said now about challenges, I think **I try really really hard** to an extent that even if it will take the time that I'll be using covering the pace-setter I try so hard to make sure that learners

❖ **Acceptance/emotional support** 1

❖ **Curriculum as barrier** 3

❖ **Curriculum as barrier** 3

❖ **Inadequate material resources/LTSM** 3

Competencies:

❖ **Teacher's commitment and hard work** 2

understand what I am trying to describe even if we talk about the maps it does not matter if it will take me the whole period but if I need to explain something to a blind learner to **make sure that they understand** I'll understand even if it takes the whole hour I'll do that so I think that is something that **I'm really really trying so hard** I'm getting there I'm not there yet but I'm getting there to explain to the extent where the learner is clear with what I'm explaining

Facilitator: In your PGCE, you did say you have a PGCE right, what are you specialising in?

Respondent: In my PGCE I'm specialising in economics and EMS

Facilitator: So you don't have any qualification or I don't know how to put it well let's say qualification in special needs?

Respondent: No I don't

Facilitator: Where I want to go is, everything that you have learned here you've learned through experience?

Respondent: Yes, experience and interest and that **passion**, it's the **passion** that kept on pushing me to get this far

(Disrupted by a knock)

Facilitator: (whispers: okay let's pause) you were talking about your experience, it taught you most of the things you know?

Respondent: Yes, uhmm I think it started with me having an interest in.. specifically with me it started with sign language to be honest so having an interest in that department and then I even decided when I was doing my PGCE to say I want to teach at school for learners with disabilities and then I started by learning sign language and then from there on being around the environment I discovered that oh there are also blind students and then it also pushed me to learning Braille. I remember when I came to the school here for the interview they asked me if I had any knowledge in Braille but then I said I have knowledge your letters your abc and what not but I'm willing to learn but for real I was willing to learn because up to now I can say I'm not really yet there but I'm getting there, I've got grade 2 Braille now so I can say yes I'm getting there

Facilitator: Okay, but with the skills that you have learned through experience do you think its necessary for somebody to go through training?

Respondent: I think it is very necessary, even with me right now though I got experience through teaching around here but I still believe that **I need training, I**

❖ Qualification not on VI, SE or IE 8

❖ **Commitment and passion** 2

❖ **Training needed** 3

still believe that I need formal training yes so ja its very very necessary for one to get training

Facilitator: At which level do you think that training should be offered, undergraduate postgraduate?

Respondent: Mmmm I think it can differ I don't know how you get to assess us but I know there are some of us who have little knowledge when it comes to the braille and the sign language and some are of course on the grade 1 and 2 so maybe I don't know how you assess them but I think those who have grade 1 and 2 and those are confident enough because it also goes with the confidence I believe they can be on the postgraduate level and others on the undergraduate

❖ Training required on both levels 3

Facilitator: So it depends on the readiness?

Respondent: Yes, absolutely

Facilitator: Uhhh I just to go back to what you were saying for example teaching a map that its very difficult you have explain, I just want to know something like a map how you go about teaching a blind learner specifically to sort of understand what it is that you're actually talking about?

Respondent: You mean in the sense where we do not have the right material?

Facilitator: Yes

Respondent: Well firstly you start by explaining by all means by starting with where they are as in like South Africa where they are then trying show them in South Africa where we are, are next to the sea we are next to which country and then on right is which country on your left is which one on top at the south where is what so that's what you do to try explain to them, other times you can explain by going to the learner saying you being here is South Africa so at the bottom of your legs is that at the right of your arm is that at the shoulder, you do that you just try by all means to make them understanding and show them that maybe the shape of your head (touching left cheek down to chin) is SA, your shoulder is Brazil that's how you will explain it you just try by all means to make sure that they get it and luckily they do get it at the end of the day, they do

❖ Using what is available 2

Facilitator: Uhhh okay sure, now we are moving to inclusive education, how best do you think it can be implemented?

Respondent: Mhm this one...

Facilitator: Or maybe let's say do you see the relevance of it your school?

Respondent: uhhh do I see the relevance of IE in this school uhhh

Facilitator: Specifically for the subjects you are teaching?

Respondent: Alright uhhhh let's say specifically on the subjects I am teaching, well I believe IE is important of course although in the subject that I'm teaching it's possible bit it's not easy especially for learners with visual impairment it's possible but it's not easy especially looking at the fact that with tourism let's say the learner is studying tourism and they develop an interest and passion at the end of the day or at the end of concluding their studies they want to work in a tourism environment so it limits them a lot to an extent that let's say for an example they want to work at a game reserve and they specifically want to be tour guide it won't be easy to be honest because they will need to see animals to say 'ladies and gentlemen over there's an elephant' so that for a learner with visual impairment cannot be easy but yes they can still work in the tourism industry or department where they will not deal with anything that requires their vision so they can still do that so ja it can happen but it's not that easy

Facilitator: As much as it not easy, I hear you the way you explain it for learners who are visually impaired especially when they are going to the workplace it might not necessarily be possible to do what they might want, but in terms of the requirements, I don't know have you received training on IE from department of education or anyone?

Respondent: Mmm maybe it was offered and I was never part of it I don't remember receiving such

Facilitator: But do you think you need such?

Respondent: **Definitely, we need that**

Facilitator: Will it help you implement it a lot better?

Respondent: I believe so, I believe so

Facilitator: Okay and lastly, as we said that we are developing a qualification in visual impairment studies, what do you think is necessary to be included, if you were one of us developing such a qualification what would you like teachers to know before they can stand in front of a class of learners who are visually impaired?

Respondent: Uhhh I think what is important for teachers to know is that as much as you can have learners with visual impairment in class but you should still know that **their needs** are different specifically on education, on **the material that they deserve for them to learn better** for example other times you find that you have learner requiring an A3 material and then you as a teacher when you see that the

❖ **Difficulty of implementing IE** 6

❖ **IE training needed** 3

Qualification:

- ❖ **LVI needs and support** 4
- ❖ **SIAS** 4
- ❖ **Collaboration** 4
- ❖ **eye conditions** 4
- ❖ **VI and causes** 4

learner can see where you are seating you conclude that they can see and therefore need an A4 material so I think that is very important for us to be taught that, as much as we are not specialising in that department we cannot conclude that the learner can see me therefore they can see. We just need to be taught how to be able to identify that or maybe or to leave it to those who specialise in it for example at our school we have those working at the OT department I think they are the ones who specialise in this, I think we can learn from them

Facilitator: Okay, anything else that you think is necessary?

Respondent: Uhhmmm another thing would knowing different eye conditions even though we don't go too deep into it as teachers, even now I'm so clueless I just hear a learner is blind but I don't know whats happening what condition is causing the eye to be like that, maybe just having a little bit of information about the dangers that can cause them to have the disability because some of them might be caused by the environment or things we are doing, like yesterday somebody was doing a presentation about writing on a coloured paper for a blind learners when you write on a pink paper the learner won't see anything you need to use a black marker so I think some of these are the ones that cause our learners to lose the vision even more so that is important to really learn not make the kids' disability even more but use the right things on them

Facilitator: I'd like thank you so much for your time

Respondent: You are welcome

LTSM, learning aids and resources, safe learning environment, skills, orientation and mobility, relevant professionals

Learning resources, skills

Orientation and mobility, LTSM, relevant professionals, skills, technological devices and software, safe environment

Accommodations

Safe and conducive environment, LTSM, accommodations, relevant professionals

Safe environment, LTSM

2 Bright green – Support by teachers

Provide training, support structure, communication with DBE

Accommodate learners, support structure

Adapt curriculum, collaborate

Adaptation

collaborate, provide conducive environment, LTSM

provide conducive environment

Refer, provide conducive environment

Develop skills, create safe environment

3 Red – Teachers' needs

Equip themselves with necessary skills

Material and physical resources

LTSM, relevant professionals

Inclusive education (IE), multiple disabilities and barriers, computer, Braille, mobility skills

Software, recent technological devices/resources

Technological devices

IE, barriers and multiple disabilities, learners' background, Braille, computer

Recruit develop skills

Training, human resource

Assistive devices, LTSM

4 Dark blue – Qualification

Knowledge on IE, barriers, use of technology for learners who are visually impaired (LVI)

Use of technology for LVI, knowledge on LVI and how to work with them, barriers

Knowledge on LVI, devices and their use, causes and implications of VI

Braille, knowledge on LVI, curriculum adaptation

Knowledge of LVI; teaching techniques and adaptations; SIAS

SIAS, techniques and adaptations

LVI, SIAS

Techniques, technology skills, SIAS, LVI

SIAS, resources skills

LVI, resources, teaching methodology, collaborating, legislation

5 Turquoise – Inclusive education meaning

Non-discrimination

Non-discrimination, mix learners for optimal functioning/support

Equal opportunity/access

Non-discrimination, offers respect and support

6 Dark grey – Inclusive education implications

Limited time, training required

Support needed, equal treatment

Training should've been provided, accommodate

Equal treatment and support

Equal/fair treatment

7 Dark red – Visual impairment meaning

Defect, disturbing functioning

Visual barriers and total blindness

Visual condition, hindrance to learn

Inability to see

Problems with vision, wearing glasses/spectacles

Problems with the eye, inability to see

8 Light grey – Lack of visual impairment qualification

No VI qualification

No VI qualification

No VI qualification

Qualification not on VI, SE or IE

No VI qualification

No VI qualification

No VI qualification

No VI qualification

9 Teal – Training helped

Training helped

10 Purple – Available resources

Availability of curtains and Braille machines

Availability of teacher assistants (human resources)

Availability of Braille and other LTSM (wool)

Resources available in media centre

Resources available

Resource available

Independence in Braille use, Braille skills

11 Pink – Thorough discussions through PRA

PRA allowed for discussions to take place

PRA allowed for discussions to take place

PRA allows for discussions

12 Dark yellow – PRA contribution

PRA allowed for peer learning and socialise

PRA viewed as a positive strategy to generate data

Social relations strengthened through PRA and peer learning and reflection

and peer learning and sharing ideas

Be helpful

Be supportive and improve treatment

Skills development

Use available resources

Open-mindedness,

Engage in research and learning – skills development

Handling VI learners

Importance of IE implementation

Develop skills – multiple disabilities

Create conducive environment, IE implementation important, ADL, use available resources

Develop skills

Teamwork

13 Green – Personal contribution of PRA

Be supportive

Encouraged

Accommodating

Empowerment

Peer learning, partnership, good relations, self enhancement, motivation

Be supportive

Sharing, togetherness, relations built

Peer learning, awareness, networking, improved self-esteem

14 Blue – Positive impact of PRA

Sharing

Sharing, understanding different issues

Encouragement, clarity gained, positive attitude

Clarity, encouragement, understanding, sharing, improve knowledge, positive presenters' attitude

Importance of SS and helping

Presenters prepared, informative sessions

Interaction and sharing, develop skills

Involvement, reflection

Involvement, encouragement, professionalism

Excellent approach

Appreciation

15 Black – Improvements needed for PRA

Lack of time

Provide presentations, increase sample

Provide presentations and visuals

More time, increase sample, presentations in Braille

Increase sample

No Braille material, off timing

Time constraints, increase sample, multiple disabilities

Inconsistent participation

Inconsistent participation, provide material prior

Increase sample

Provide material prior, increase time

Updates

Provide material prior, be inclusive

Increase sample, benefits

Break down module

Time constraints

Provide material prior, be inclusive

Provide material prior, be inclusive

Updates

increase sample

time

increase sample

time

increase sample

updates

bring resources

provide details on time

provide resources

No Braille material

Additional time needed

Increase sample

Separate participants

APPENDIX J – STEP 5 ANALYSIS

THEMES AND SUBTHEMES

Theme 1: Utilising PRA to access research partners' knowledge and expertise

Subtheme 1.1: Insight into educators' understanding of inclusive education

Subtheme 1.2: Insight into research partners' understanding of the needs of learners with visual impairment

Subtheme 1.3: Insight into educators' perceptions of their needs to implement inclusive education with learners with visual impairment

Subtheme 1.4: Relying on research partners' input for programme development

Theme 2: Value for participants of being research partners in a PRA process

Subtheme 2.1: Value of relationships and collaboration with peers to reach a common goal

Subtheme 2.2: Value of having a voice and being heard

Subtheme 2.3: Learning from and with others

Theme 3: Value for personal and professional development of participants

Subtheme 3.1: Increased awareness of own competence and commitment

Subtheme 3.2: Realising the importance of training and further training

Subtheme 3.3: Feeling empowered and forming part of positive change

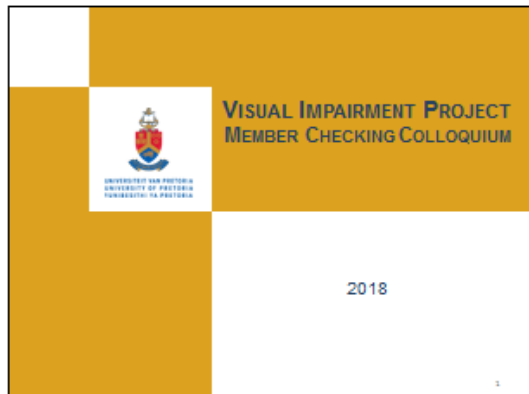
Theme 4: Recommendations for future application of the PRA process

Subtheme 4.1: Involving more participants from additional sectors in society

Subtheme 4.2: Allowing more time for the PRA process to unfold

Subtheme 4.3: Remaining aware of and accommodating the special needs of participants

APPENDIX K – MEMBER-CHECKING PPP ON THEMES AND SUBTHEMES



Introduction

- Part of a Department of Higher Education and Training/European Union initiative at national level:
 - Visual impairment (University of Pretoria)
 - Deaf and hard-of-hearing (WITS)
 - Neurological disabilities (University of Johannesburg)

Purpose and deliverables of the UP project

- Research with teachers and stakeholders
- Programme development (Adv Diploma)
- Material development (OER)
- Establishment of a Centre for Visual Impairment Studies (CVIS)

Core team

- Four academics

- Four part-time administrators
- Three part-time assistants
- Five postgraduate students

Phases of the project

- Nov-April**
 - Data generation at full-service and special schools
 - Data generation during stakeholder colloquium
- Apr-May**
 - Data analysis
 - Draft outline of postgraduate programme and modules
- May-June**
 - Member checking during five colloquiums: Pretoria, Pietermaritzburg, Polokwane, Bloemfontein, Mthatha
- Sept**
 - Follow-up stakeholder colloquium, Module writer workshop
 - Development of programme, module content and OER material

Progress of research project

- Research in schools
 - 7 full-service and 10 special needs schools in 5 provinces, 255 teacher-participants
 - November 2017 to April 2018
 - Prompts for discussion
- Research with 50 experts at a colloquium
- Data analysis and draft outline of programme

More about the postgraduate qualification

- Advanced Diploma in Visual Impairment Studies
- NQF level 7
- Target market
- Distance education mode of delivery, with the option of contact mode later
- Minimum two years, maximum four



Faculty of Education

- Open educational resource material
- Entry requirements
 - Bachelor's degree or other recognised teaching qualification
 - Competence in Braille (option of a short course)
- Training teachers across spheres to teach learners who are visually impaired



Faculty of Education

Proposed themes and subthemes



Faculty of Education

Theme 1: Utilising PRA to access research partners' knowledge and expertise

- **Subtheme 1:** Insight into teachers' understanding of inclusive education
- **Subtheme 2:** Insight into research partners' understanding of the needs of learners with visual impairment
- **Subtheme 3:** Insight into teachers' perceptions of their needs to implement inclusive education with learners with visual impairment
- **Subtheme 4:** Relying on research partners' input for programme development



Faculty of Education

Theme 2: Value for participants of being research partners in a PRA process

- **Subtheme 1:** Value of relationships and collaboration with peers to reach a common goal
- **Subtheme 2:** Value of having a voice and being heard
- **Subtheme 3:** Learning from and with others



Faculty of Education

Theme 3: Value for personal and professional development of the participants

- **Subtheme 1:** Increased awareness of own competence and commitment
- **Subtheme 2:** Realising the importance of training and further training
- **Subtheme 3:** Feeling empowered in forming part of positive change

11

Theme 4: Recommendations for future application of the PRA process

- **Subtheme 1:** Involving more participants from additional sectors in society
- **Subtheme 2:** Allowing more time for the PRA process to unfold
- **Subtheme 3:** Remaining aware of and accommodating the special needs of participants

18

Thank you!

19

APPENDIX L1 – FREE STATE PERMISSION LETTER

Enquiries: KX Motshumi
Ref: Research Permission: M Thabe
Tel: 051 404 9283 / 9221 / 079 503 4943
Email: K.Motshumi@feducation.gov.za



M Thabe
134 Mosieleng Street
Phiritona
HEILBRON, 9650

078 343 8401

Dear Miss Thabe

APPROVAL TO CONDUCT RESEARCH IN THE FREE STATE DEPARTMENT OF EDUCATION

1. This letter serves as an acknowledgement of receipt of your request to conduct research in the Free State Department of Education.

2. **Topic:** Development of an Advanced Diploma in Education in Visual Impairment Studies.

Schools involved: Bartimeas, Hodisa, Willem Postma in Motheo district and Thiboloha in Thabo Mofutsanyana district.

Target Population: All educators in all grades who are working with learners with a visual impairment.

Period of research: From the date of signature of this letter until 30 September 2018. **Please note the department does not allow any research to be conducted during the fourth term (quarter) of the academic year.**

3. Should you fall behind your schedule by three months to complete your research project in the approved period, you will need to apply for an extension.

4. The approval is subject to the following conditions:

4.1 The collection of data should not interfere with the normal tuition time or teaching process.

4.2 A bound copy of the research document or a CD, should be submitted to the Free State Department of Education, Room 319, 3rd Floor, Old GNA Building, Charlotte Maxeke Street, Bloemfontein.

4.3 You will be expected, on completion of your research study to make a presentation to the relevant stakeholders in the Department.

4.4 The attached ethics documents must be adhered to in the discourse of your study in our department.

5. Please note that costs relating to all the conditions mentioned above are your own responsibility.

Yours sincerely


DR JEM SEKOLANYANE
CHIEF FINANCIAL OFFICER

DATE: 01/02/2018

Enquiries: KK Motshumi
Ref: Notification of research: M Thabe
Tel. 051 404 9221 / 079 503 4943
Email: K. Motshumi@fseducation.gov.za



The District Director
Motho

Dear Mr Moloi

NOTIFICATION TO CONDUCT RESEARCH PROJECT IN YOUR DISTRICT BY M THABE

1. The above mentioned candidate was granted permission to conduct research in your district and your Chief Directorate as follows:

Topic: Development of an Advanced Diploma in Education in Visual Impairment Studies.

Schools involved: Bartimea, Hodisa, Willem Postma in Motheo district.

Target Population: All educators in all grades teaching learners with a visual impairment.

2. **Period:** From date of signature to 30 September 2018. **Please note the department does not allow any research to be conducted during the fourth term (quarter) of the academic year nor during normal school hours.**
3. **Research benefits:** The Free State province has specialized schools as well as mainstream schools which accommodate learners with visual impairment and/or are blind and is also on the route to the implementation of inclusive education. In its implementation, inclusive education policy introduces the initiative of Full Service Schools which admits all learners regardless of their learning needs. Therefore, educators employed in these schools may need certain skills in order to best support learners who are visually impaired within these schools without necessarily referring them to special needs schools. The value of this research will also lie in its possibility to promote the use of inclusive education policy to support learners who are visually impaired. Furthermore, the postgraduate qualification will be accessible for all practicing and prospective educators to apply and therefore be equipped with the necessary skills to teach and support learners who are visually impaired.
4. The Strategic Planning, Policy and Research Directorate will make the necessary arrangements for the researcher to present the findings and recommendations to the relevant officials in your district.

Yours sincerely


DR JEM SEKOLANYANE
CHIEF FINANCIAL OFFICER

DATE 07/02/2018

RESEARCH APPLICATION M THABE NOTIFICATION EDITED JAN 2018 MOTHEO DISTRICT

Strategic Planning, Policy & Research Directorate

Private Bag X20565, Bloemfontein, 9300 - Room 318, Old CNA Building, 3rd Floor, Charlotte Maxeke Street, Bloemfontein

Tel: (051) 404 9283 / 9221 Fax: (086) 6678 678

APPENDIX L2 - GAUTENG PERMISSION LETTER



GAUTENG PROVINCE

Department: Education
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	11 October 2017
Validity of Research Approval:	05 February 2018 – 28 September 2018 2017/293
Name of Researcher:	Thabe M.
Address of Researcher:	10 Mont Serrat, Ridgeview Road Waterkloof Ridge Pretoria, 0002
Telephone Number:	072 668 6744
Email address:	Maesala.Thabe@up.ac.za/pm.thabe@gmail.com
Research Topic:	Utilising Participatory Reflection and Action (PRA) to develop a postgraduate qualification in Visual impairment studies.
Number and type of schools:	One Primary School, One Secondary School, Two LSEN schools
District/s/HO	Tshwane North, Tshwane South, Tshwane West

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

F. Tshabalala 11/10/2017

1

Making education a societal priority

Office of the Director: Education Research and Knowledge Management

7th Floor, 17 Simmonds Street, Johannesburg, 2001

Tel: (011) 356 0488

Email: Faith.Tshabalala@gauteng.gov.za

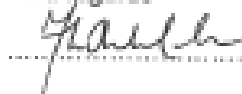
Website: www.education.gpg.gov.za

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1. The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.
2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.
3. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
4. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
5. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
6. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
7. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
8. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
9. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
10. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
11. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
12. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
13. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
14. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards



Ms Faith Tshabalala

CES: Education Research and Knowledge Management

DATE: 11/10/2017

2

Making education a societal priority

Office of the Director: Education Research and Knowledge Management


7th Floor, 17 Simmonds Street, Johannesburg, 2001

Tel: (011) 355 0488

Email: Faith.Tshabalala@gauteng.gov.za

Website: www.education.gpg.gov.za

APPENDIX L3 - LIMPOPO PERMISSION LETTER

	LIMPOPO PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA		
DEPARTMENT OF EDUCATION			
Ref: 2/2/2	Enq: MC Makola PhD	Tel No: 015 290 9448	E-mail: MakolaMC@edu.limpopo.gov.za
Maesala , Sefotho & Ferreira			
Department of Educational Psychology			
Faculty of Education			
University of Pretoria			
Groenkloof Campus			
0001			
RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH			
<hr/>			
1. The above bears reference.			
2. The Department wishes to inform you that your request to conduct research has been approved. Topic of the research proposal: <u>“DEVELOPMENT OF QUALIFICATIONS IN SUPPORT OF EDUCATORS WHO TEACH CHILDREN WITH DISABILITIES”</u> .			
3. The following conditions should be considered:			
3.1 The research should not have any financial implications for Limpopo Department of Education.			
3.2 Arrangements should be made with the Circuit Office and the schools concerned.			
3.3 The conduct of research should not anyhow disrupt the academic programs at the schools.			
3.4 The research should not be conducted during the time of Examinations especially the fourth term.			
REQUEST FOR PERMISSION TO CONDUCT RESEARCH: MAESELA SEFOTHO & FERREIRA			
CONFIDENTIAL			
Cnr. 113 Biccard & 24 Excelsior Street, POLOKWANE, 0700, Private Bag X9489, POLOKWANE, 0700 Tel: 015 290 7600, Fax: 015 297 6920/4220/4494			

- 3.5 During the study, applicable research ethics should be adhered to; in particular the principle of voluntary participation (the people involved should be respected).
- 3.6 Upon completion of research study, the researcher shall share the final product of the research with the Department.
- 4 Furthermore, you are expected to produce this letter at Schools/ Offices where you intend conducting your research as an evidence that you are permitted to conduct the research.
- 5 The department appreciates the contribution that you wish to make and wishes you success in your investigation.

Best wishes.



Ms NB Mutheiwana
Head of Department

11/12/17

Date

REQUEST FOR PERMISSION TO CONDUCT RESEARCH. MAESELA, BEFOTHO & FERREIRA

CONFIDENTIAL



28 November 2017

Head of Department
Department of Education building
Cnr 113 Biccard & 24 Excelsior Street
Polokwane North
Polokwane (Pietersburg)
0699

REQUEST TO CONDUCT RESEARCH IN LIMPOPO PROVINCE SCHOOLS

The Department of Higher Education and Training (DHET), in collaboration with the European Union (EU), has embarked on a national project that aims to empower educators to implement inclusive education policy. The DHET identified three priority areas for the development of qualifications in support of educators who teach children with disabilities, of which visual impairment is one. The aim is to better equip educators at both mainstream and specialised schools.

The Department of Educational Psychology at the University of Pretoria was successful in securing DHET/EU funding to develop an Advanced Diploma in Education: Visual Impairment Studies. This qualification is targeted at educators at mainstream/full service and specialised schools, and will aim to enhance educators' knowledge and skills in teaching learners and managing schools that cater for learners with visual disabilities. This qualification will therefore support the DHET's strategic response to White paper 5 (inclusive education policy), focusing on the inclusion of learners with special needs in mainstream schools and empowering educators to offer quality education in such instances. No formal qualification in this field is currently offered in South Africa. The development of the qualification will be based on research in the field, involving both mainstream/full service and specialised schools in South Africa.

We hereby request your province participation in the project. More specifically, we would like to invite educators from two specialised schools of the visually impaired and blind as well as two full service schools that admit learners regardless of their disabilities. We invite them to participatory workshops and follow-up individual interviews if required. Workshop discussions

will focus on educators' needs and expectations when teaching learners with visual disabilities, and will subsequently inform the content of the modules that will form part of the said qualification; these workshops will also focus on the envisaged implementation of inclusion education policy. Following the development of the module content, educators will be invited to a colloquium, for feedback and additional ideas before the module content is finalised. As the participatory approach that we will follow involves cycles of reflections and the formulation of possible action plans, educators may also gain ideas for implementation in discussion with others. Our criteria for requesting educators' participation are based on the expertise they hold in the field of visual impairment education contexts and inclusive education.

The research will be qualitative, relying on case study design. Participants will be purposefully selected and the criteria will be as followed:

- Participants need to be teaching at Full Service Schools (mainstream) and/or specialised schools.
- Participants in specialised schools need to be working with learners who are visually impaired.
- Participants may need to be able to understand and communicate in English.
- Participants need to be willing to voluntarily participate and give informed consent; however they will have the right to withdraw.

Thank you for your consideration of this request.

Kind regards



Prof Ronel Ferreira
ronel.ferreira@up.ac.za
012 420 5504



Dr Max Sefotho
mxmaxs.sefotho@up.ac.za
012 420 2772



Ms Maesala Thabe
maesala.thabe@up.ac.za
012 420 5583/ 0783438401

APPENDIX L4 - KWAZULU NATAL PERMISSION LETTER



education

Department:
Education
PROVINCE OF KWAZULU-NATAL

Enquiries: Phindile Duma

Tel: 033 392 1041

Ref:204/8/1384

Ms M Thebe
134 Mosieng Street
Phiribona
Heilbron
9650

Dear Ms Thebe

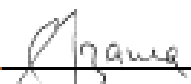
PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: "UTILISING PARTICIPATORY REFLECTION AND ACTION (PRA) TO DEVELOP A POSTGRADUATE QUALIFICATION IN VISUAL IMPAIRMENT STUDIES", in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 09 October 2017 to 09 July 2020.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Miss Connie Kehlogile at the contact numbers below
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

Arthur Blexall School
Georgedale School

Ethembeni School
Okhazini School


Dr. EV Ngema
Head of Department: Education
Date: 12 October 2017

KWAZULU-NATAL DEPARTMENT OF EDUCATION
Postal Address: Private Bag X9137 - Pietermaritzburg - 3200 - Republic of South Africa
Physical Address: 347 Burger Street - Anton Lembede Building - Pietermaritzburg - 3201
Tel: +27 33 392 1004/11 - Fax: +27 033 392 1003- Email: Phindile.Duma@kzndoe.gov.za /Web: www.kzndoe.gov.za
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APPENDIX L5 – EASTERN CAPE PERMISSION LETTER



STRATEGIC PLANNING POLICY RESEARCH AND SECRETARIAT SERVICES

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Date: 22 March 2018

Ms. M Thabe

Cnr George Storrar and Leyds street

Faculty of Education

Groenkloof campus

University of Pretoria

0002

Dear Ms. Thabe

**PERMISSION TO UNDERTAKE AN INDEPENDENT STUDY: DEVELOPMENT OF AN
ADVANCED DIPLOMA IN EDUCATION IN VISUAL IMPAIRMENT STUDIES**

1. Thank you for your application to conduct research.
2. Your application to conduct the abovementioned research involving three (3) schools of learners with Special Educative Needs, Under the jurisdiction of the Eastern Cape Department of Education (ECDoE) is hereby approved based on the following conditions:
 - a. there will be no financial implications for the Department;
 - b. institutions and respondents must not be identifiable in any way from the results of the investigation;
 - c. you present a copy of the written approval letter of the Eastern Cape Department of Education (ECDoE) to the Cluster and District Directors before any research is undertaken at any institutions within that particular district;
 - d. you will make all the arrangements concerning your research;
 - e. the research may not be conducted during official contact time;
 - f. should you wish to extend the period of research after approval has been granted, an application to do this must be directed to Chief Director: Strategic Management Monitoring and Evaluation;

- g. your research will be limited to those institutions for which approval has been granted, should changes be effected written permission must be obtained from the Chief Director: Strategic Management Monitoring and Evaluation;
 - h. you present the Department with a copy of your final paper/report/dissertation/thesis free of charge in hard copy and electronic format. This must be accompanied by a separate synopsis (maximum 2 – 3 typed pages) of the most important findings and recommendations if it does not already contain a synopsis;
 - i. you present the findings to the Research Committee and/or Senior Management of the Department when and/or where necessary;
 - j. you are requested to provide the above to the Chief Director: Strategic Management Monitoring and Evaluation upon completion of your research;
 - k. you comply with all the requirements as completed in the Terms and Conditions to conduct Research in the ECDoE document duly completed by you;
 - l. you comply with your ethical undertaking (commitment form);
 - m. you submit on a six monthly basis, from the date of permission of the research, concise reports to the Chief Director: Strategic Management Monitoring and Evaluation.
3. The Department reserves a right to withdraw the permission should there not be compliance to the approval letter and contract signed in the Terms and Conditions to conduct Research in the ECDoE.
 4. The Department will publish the completed Research on its website.
 5. The Department wishes you well in your undertaking. You can contact the Director, Ms. NY Kanjana on the numbers indicated in the letterhead or email nelisa.kanjana@ecdoe.gov.za should you need any assistance.



NY KANJANA
DIRECTOR: STRATEGIC PLANNING POLICY RESEARCH & SECRETARIAT SERVICES
FOR SUPERINTENDENT-GENERAL: EDUCATION

APPENDIX M1 – INFORMED CONSENT LETTERS FOR TEACHERS



CONSENT LETTER

Dear Educator

Background:

You are invited to participate in a research study by the University of Pretoria, Department of Educational Psychology. Before you decide to participate in this study, it is important that you understand why the research is being conducted and what your participation will involve. Please take the time to read the following information and ask for any clarity you may need.

Purpose of the study:

The purpose of this study is to explore educators' needs, experiences and expectations in terms of the implementation of inclusive education policy, more specifically in support of learners who are visually impaired. The findings of the study will be used to develop a postgraduate diploma in visual impairment studies, in support of teacher training in the field of inclusive education policy implementation.

Research activities:

If you decide to participate you will be expected to participate in two participatory workshops of 2-3 hours each, presented after hours at your school over two days, towards the end of 2017 or beginning of 2018. In addition, you may be requested to allow classroom observation to take place in your class during one morning. Throughout, the research team will be making field notes, taking photographs, making audio-recordings, and observing all activities.

In addition to these activities, you will be invited to take part in a colloquium in 2018, in order to discuss the developed module content and share any additional information and ideas you would like to add. Observation, field notes, recordings and photographs will once again form part of this activity. If needed, you may be invited to participate in a follow-up interview.

Benefits of participation:

Your contributions will ultimately inform the development of a postgraduate qualification, which will benefit teachers in future. The discussions that you participate in may also be of value and provide you with ideas to implement in class.

Risks:

No risks are foreseen however in the case of any such unfortunate event, we will deal with it in a professional and confidential manner.

Confidentiality and anonymity:

All information obtained will be dealt with in a confidential way and your and your school's identity will be protected. Even though recordings will be made and photographs taken, your face will be disguised except if you opt for it to be shown. All recordings will be transcribed and identities protected by using pseudonyms when reporting on the data. No information or identities will be disclosed to anyone outside the research team.

Voluntary Participation:

Your participation in this study is voluntary. It is up to you to decide whether or not to take part. If you decide to take part, you are still free to withdraw from the study at any time and without giving a reason.

Compensation:

There is no monetary compensation to you for your participation in this study.

Consent

By signing this consent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I therefore voluntarily agree to take part in this study.

Full name of participant _____

Signature _____

Date _____

Consent to take pictures and show my face YES / NO

Researcher's signature _____

APPENDIX M2 – INFORMED CONSENT LETTERS FOR STAKEHOLDERS



CONSENT LETTER

Dear Stakeholder

You are invited to participate in a research study by the University of Pretoria, Department of Educational Psychology. Before you decide to participate in this study, it is important that you understand why the research is being conducted and what your participation will involve. Please take the time to read the following information and ask for any clarity you may need.

Purpose of the study:

The purpose of this study is to explore educators and stakeholders' needs, experiences and expectations in terms of the implementation of inclusive education policy, more specifically in support of learners who are visually impaired. The findings of the study will be used to develop a postgraduate diploma in visual impairment studies, in support of teacher training in the field of inclusive education policy implementation.

Research activities:

If you decide to participate you will be expected to participate in this participatory workshop of 5 hours. Throughout, the research team will be making field notes, taking photographs, making audio-recordings, and observing all activities.

In addition to these activities, you will be invited to take part in a colloquium towards mid or end of 2018, in order to discuss the developed module content and share any additional information and ideas you would like to add. Observation, field notes, recordings and photographs will once again form part of this activity. If needed, you may be invited to participate in a follow-up interview.

Benefits of participation:

Your contributions will ultimately inform the development of a postgraduate qualification, which will benefit teachers and other stakeholders in future. The discussions that you participate in may also be of value and provide you with ideas to implement in your field.

Risks:

No risks are foreseen however in the case of any such unfortunate event, we will deal with it in a professional and confidential manner.

Confidentiality and anonymity:

All information obtained will be dealt with in a confidential way and your identity will be protected. Even though recordings will be made and photographs taken, your face will be disguised except if you opt for it to be shown. All recordings will be transcribed and identities protected by using pseudonyms when reporting on the data. No information or identities will be disclosed to anyone outside the research team.

Voluntary Participation:

Your participation in this study is voluntary. It is up to you to decide whether or not to take part. If you decide to take part, you are still free to withdraw from the study at any time and without giving a reason.

Compensation:

There is no monetary compensation to you for your participation in this study.

Consent

By signing this consent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I therefore voluntarily agree to take part in this study.

Full name of participant _____

Signature _____

Date _____

Consent to take pictures and show my face YES / NO

Researcher's signature _____

APPENDIX N – SUMMARY OF FINDINGS (TABLES)

Table N-1: Findings related to Theme 1

Sub-theme	Author (s) and year	Existing knowledge	Interpretive discussion on how this study's results support existing literature
Sub-theme 1.1: Insight into teachers' understanding of IE	DBE, 2001 Forlin, 2010 Landsberg et al. 2005 AER & COSB, 2019 Eckman, 2001	Inclusive education means schools need to accommodate all learners without discrimination. Inclusive education is about embracing and accommodating diversity. Access to relevant resources should be granted.	In this study participants believed inclusive education as an approach that eliminates discrimination. They further understood it as equal access to resources and education. Inclusive education promotes access to educational resources for all learners, especially those with special needs.
Sub-theme 1.2: Insight into research partners' understanding of the needs of learners with visual impairment	Gibson, 2002 Mukherjee, 1997 American Foundation for the Blind, 2011	Researchers are able to gain understanding of participants when they immerse themselves in their (participants) surroundings. Participants feel unrestricted to engage with researchers once they become aware that researchers are willing to learn from them.	Participants were able to narrate learners' needs as they experience them in their schools and classrooms. This they did through being part of PRA activities. Although this study did not involve learners directly, but as a researcher I was able to gain insight into their needs through engaging with their teachers.
Sub-theme 1.3: Insight into teachers' perceptions of their own needs and expertise	Molteberg, 1995 Chambers, 1994 Bayram et al., 2015 Lamichhane, 2017 American Foundation for the Blind, 2011 American Optometric Association, 1997	When participants' views are positively acknowledged they tend to release the valuable knowledge they possess and give more than expected toward the study. The diagnosis of visual impairment can be done by specific healthcare specialists with referrals.	Participants were able to reveal their own needs and expertise through their involvement in PRA activities. As they noticed I take their perceptions seriously, they began to freely share their experiences. Participants were found to be accommodating learners in their classrooms and schools although at times not aware of it. Teachers need to be familiar with referral procedures.

Sub-theme 1.4: Relying on research partners' input for programme development	Chambers, 2008 Chilisa, 2012 Thomas, 2016 Ofsted, 2014	PRA is a people centred approach and allows for knowledge co-construction.	In this study participants were relied on for the development of the postgraduate qualification. Teachers and expert stakeholders developed the qualification collectively. Relying on participants informed programme development.
Sub-themes	Author (s) and year	Contradiction/existing knowledge	Interpretive discussion: possible explanation for contradiction
Sub-theme 1.1: Insight into teachers' understanding of inclusive education	Ainscow, 2002 Bayram et al., 2015 DBE, 2001 DBE, 2016	Special needs schools need to be support structures for FSS and ordinary public schools. Instead of drawing apart, these schools and their teachers need to rely on each other for support and successful inclusive education implementation.	There was a need by some participants to be separated during the course of the study. Participants felt that they have different experiences of inclusive education and learners with visual impairment therefore taking part on different research platforms would help. Some teacher participants felt that their inclusive education will not be possible at their schools.
Sub-theme 1.2: Insight into research partners' understanding of the needs of learners with visual impairment	Brydges and Mkandawire, 2016 Datta and Talukdar, 2016 DBE, 2001 Forlin, 2012 Simeonsson and Rosenthal, 2001 WHO, 1992	One cannot say they fully understanding someone's situation/needs if they have not experienced it themselves. Learners' needs can be met with inclusive education. Other developmental domains and senses of learners with visual impairment should not be ignored.	Participants may have perceived learners' needs as easily understandable as some of them work with learners with visual impairment on a daily basis. Some participants were of the idea that inclusive education can never work in their schools. Participants concern was based on learners with multiple disabilities.

Table N-2: New insight related to Theme 1

New insight	Interpretive discussion
Acquisition of comprehension into participants' knowledge and expertise through the use of PRA.	Relying on PRA as the main and in addition to the traditional data generation techniques proves to be advantageous. The fact that it builds an atmosphere of trust between researchers and participants makes PRA a better approach to use for enormous research studies.
Emphasis on the context of research in order for research to relate well with participants experiences and consider them as experts.	As researchers decide on the participants and case sampling, it is important for them to be willing to physically be where the study takes place. This then results in researchers better understanding what they are studying and immersing themselves in the ethos and routines of their participants.
The willingness of participants to share more of their experiences as they become aware of the researchers interest and good intentions.	The researchers' attitude and involvement somehow seem to influence how participants respond to the study. The more participants are drawn to the researcher and the topic the better and positive their response.
Non-acceptance of visual impairment by some learners.	Learners may not have been prepared about the possibility of them losing their sight and that may be heavy on them especially if they are not receiving any professional counselling or debriefing intervention.
Relying on research partners' insight and expertise to develop a programme.	Not going into the research field to impose knowledge assist as participants are considered as experts of their situations, therefore in a better position to inform the programme.

Table N-3: Findings related to Theme 2

Sub-theme	Author (s) and year	Existing knowledge	Interpretive discussion on how this study's results support existing literature
<p>Sub-theme 2.1: Value of relationships and collaboration with peers to reach a common goal</p>	<p>Agyarko, 1998 Aubel, 2004 Chambers, 1994 Cheatham-Rojas and Shen, 2008 DBE, 2001 Soodak, 2004 Brown et al., 2013 UNESCO, 1994</p>	<p>PRA fosters relationships and collaborative effort for achievement of certain goals. Partnerships are vital in the PRA process as the results of the research somehow depend on them if participants are to continue impacting their communities positively. Researchers in PRA attempt to promote partnerships between participants so that when the research is done, participants can be able to continue playing a supportive role towards each other and others outside the partnership.</p>	<p>There was a collaborative effort between those involved in this study with the aim of developing a qualification. Participants in this study formed working partnerships that they already agreed on that beyond this they will continue working together. Participants perceived each other as peers that they can lean on should they require any assistance when researchers are no longer around. They realised the significance of these partnerships for future benefit. A team effort is required when implementing inclusive education for learners with visual impairment.</p>
<p>Sub-theme 2.2: Value of having a voice and being heard</p>	<p>Chambers, 1999 Fals-Borda, 1991 Watters et al., 2010</p>	<p>PRA does not promote isolation and exclusion of people who find themselves in unfavourable situations rather PRA researchers listens to people's challenges and capacitates them to be resources in themselves</p>	<p>Visual impairment community has been overlooked for a while in the country and finally they felt that someone has come to their rescue. As opposed to giving participants solutions just like that, I as researcher consulted with participants and recognised their abilities to resolve their own challenges. As such participants felt included and that their concerns were listened to. When power is distributed equally, participants are more willing to engage and give input.</p>

<p>Sub-theme 2.3: Learning from and with others</p>	<p>Binns et al., 1997 Pain and Francis, 2003 Makoelle, 2014</p>	<p>Participants take part in research mostly with the aim of restoring their dreadful situations and support those who are less fortunate. PRA promotes joint problem identification and resolution.</p>	<p>Participants committed themselves to become supportive towards learners with visual impairment and their teachers. Through the development of the qualification, participants have supported current and prospective teachers working with learners with visual impairment. After being made aware of the lack of a qualification in visual impairment studies, participants took it upon themselves to ensure that such qualification is successfully developed so as to equip people in the visual impairment field. In this case, sharing of ideas and information became vital.</p>
<p>Sub-themes</p>	<p>Author (s) and year</p>	<p>Contradiction/existing literature</p>	<p>Interpretive discussion: possible explanation for contradiction</p>
<p>Sub-themes 2.1: Value of relationships and collaboration with peers to reach a common goal</p>	<p>Chambers and Guijt, 1995 Egerton University, 2000 Gibson, 2002 Binns et al., 1997</p>	<p>Visual presentation in terms of photographs and audio is necessary for presentation of idea. PRA is time consuming. Participants may modify behaviour in the presence of the researcher. Some research approaches do not allow for interaction but impose hand-out assistance on the participants.</p>	<p>Participants were comfortable with PRA matrices as the encouraged engagement. Participants did not perceive the PRA process as consuming their time, they rather required more time for the process to unfold. Participants did not modify their behaviour, they remained themselves in their natural contexts. In the research approach applied in this study allows for collaboration through consultation and involvement.</p>

Table N-4: New insight related to Theme 2

New insight	Interpretive discussion
<p>Management of relationships while engaging in mutual learning. These relationships led to growth and development in the visual impairment field.</p>	<p>Working relationships from different people who originate from different angles of work are crucial. However, the establishment and management of such relationships require maturity all involved parties. When learning is involved, it is important that people be civil towards one another for the greater good. Not only does working relationships benefit those involved but it helps the field to develop and grow in terms of reaching more people and meeting more needs addressed.</p>
<p>Being part of PRA has motivated participants to form a community of support.</p>	<p>As groups that are often left in the dark, lacking someone to intervene are usually the ones that actively want to help others. For such groups it is important for them to be supportive and provide all the necessary assistance to those who may need it. Being part of a community of support also allows people to go back to their workplaces and become facilitators of positive change.</p>
<p>PRA makes it possible to involve and engage with different groups at the same time to reach a common goal.</p>	<p>When developing a programme as broad as that of visual impairment it is risky to rely on one set of expertise from only one group. Allowing for multiple groups to get involved increases the rigour of the study.</p>

Table N-5: Findings related to Theme 3

Sub-theme	Author (s) and year	Existing knowledge	Interpretive discussion on how this study's results support existing literature
Sub-theme 3.1: Increased awareness of own competence and commitment	Maree, 2007 Pain and Francis, 2003 Ozanne and Saatgcioglu, 2008 Herr and Anderson, 2005 Aubel, 2004	PRA helps people to identify their assets and resources in order to resolve their challenges. Participants are then equipped on how to relevantly use and rely on the identified assets. Participants ought to become aware of what is significant and make the most of it.	Participants in this study became aware of their competence while they were involved in PRA activities and they began to support learners accordingly. Through the awareness of competence, participants were then committed to contribute towards success of the qualification. Participants realised their competence and began to do more of the things that are beneficial for the learners.
Sub-theme 3.3: Feeling empowered and forming part of positive change	James, 2007 Kapoor and Jordan, 2009 Ozanne and Saatgcioglu, 2008 Bayram et al., 2015 Lamicchane (2017)	PRA has a way of inspiring those involved in it to want to have a positive impact in their communities.	Participants in this study had already started to support their learners with visual impairment with skills they learned from their peers, thus being positive change agents even before the completion of the study. Through sharing valuable information participants felt empowered to go back bring about the much needed change. In addition to being empowered to implement positive change, participants were also empowered to improve their own knowledge and skills through furthering their education.
Sub-themes	Author (s) and year	Contradiction/existing literature	Interpretive discussion: possible explanation for contradiction
Sub-theme 3.2: Realising the importance of training and further training	Mbengwa, 2010 Grenier, 1998 Eloff & Kgwete, 2007	Implementation of inclusive education focuses on changing teachers' attitudes. There exist other unresolved issues towards the readiness of South African schools to	Through their participation in PRA activities and sharing knowledge with peers, teachers rather focused on the knowledge and skills they have gained in order implement inclusive education better. Teachers believe that they are ready to implement

		successfully implement inclusive education.	inclusive education as a result of their participation in this study.
Sub-theme 3.3: Feeling empowered and forming part of positive change	Khoaeane, 2012	Inclusive education implementation proves to leave teachers stranded with increased workload.	Participants in this study felt empowered and ready to go back to their schools for the implementation.

Table N-6: New insight related to Theme 3

New insight	Interpretive discussion
Participants' reflection and recognition of their own competencies and expertise and also their shortcomings.	Placing participants with their peers yields the result of them engaging in talks that are reflective in nature, building each other and showing each other strengths. This also helps with confidence building. Additionally, this reflection can assist participants to realise the elements which they need further training in. Thus, the reflection component of PRA is essential for participants to engage in.
Increased self-worth and confidence due to participating in PRA activities. Changed attitude towards policy implementation.	When one becomes of aware of their hidden capabilities they gain confidence and thus their self-worth is improved. Knowing that one is a positive change agent in the lives of learners with visual impairment also has the potential to lift one's spirit. The realisation that policy can actually be a supportive measure for learners can assist in changing implementers' attitude of the better.

Table N-7: Findings related to Theme 4

Sub-theme	Author (s) and year	Existing knowledge	Interpretive discussion on how this study's results support existing literature
Sub-theme 4.1: Involving more participants from additional sectors in society	Chambers, 1999 Pain and Francis, 2003 Chambers and Guijt, 1995	Interaction and engagement are significant in PRA. Discussions that involve all those who are part of the study are valued more than the bigger sample that may be chaotic and difficult to handle. Participants deserve utmost respect and consideration from researchers.	The sample that was included in this study was perceived as relevant and sufficient for the purpose of the study. Engagement and participation were thus adequate. The research team respected participants as well as their contributions.
Sub-theme 4.2: Allowing more time for the PRA process to unfold	Kapoor and Jordan, 2009 Simaraks, 2010	PRA, like any other participatory methodology, tends to be time consuming. This is due to the emphasis it gives to discussions and presentations.	Some activities could not be completed due to time constraints. As a researcher I needed to be flexible and supplement activities that were not performed with other data generation techniques.
Sub-theme 4.3: Remaining aware of and accommodating the special needs of participants	Aubel, 2004 Chilisa, 2012 Kane, 1998 Walter, 2009 Grenier, 1998 Lunch and Lunch, 2006	Participants' requirements are important and therefore need to be met for maximum participation. Although participants may have what looks like similar needs, the manner of accommodation may be different. Presentation of ideas should be in a way that is suitable and accommodating those involved. Discussions should be dynamic, ensuring that participants are included.	Some participants in this study were totally blind while others were partially sighted, apart from being a researcher I also found that I need to accommodate their needs. During the initial colloquium they stated their needs and on the second one (member-checking) these needs were accommodated by providing Braille programme, co-researchers assisted with registrations and directions at the venues.
Sub-themes	Author (s) and year	Contradiction/existing literature	Interpretive discussion: possible explanation for contradiction
Sub-theme 4.1: Involving more participants from	Egertron University, 2000 Walter, 2009	The sample size is sufficient as long as it answers the research questions and meets the purpose of the study	Participants felt that invited more people/sectors would benefit the study. There was a need to re-emphasise the

additional sectors in society		adequately. Interaction can be chaotic if groups of participants are bigger.	sample amount and selected participants.
Sub-theme 4.2: Allowing more time for the PRA process to unfold	Egertron University, 2000	PRA can be time consuming considering all the processes involved	Participants required more time to be added so that they can refine their responses.
Sub-theme 4.3: Remaining aware of and accommodating the special needs of participants	Chambers and Guijt, 1995 Makoelle, 2014 Patton, 2002	Not every participant is comfortable with sharing their ideas in a large group. Some would prefer private interaction with the researcher.	Participants in this study were involved and engaged in PRA discussions, not showing signs of seeking individualised private interaction.

Table N-8: New insight on Theme 4 findings

New insight	Interpretive discussion
There are participants who could be hindered by the kind of methods used in generating data.	Flexibility proves to be important when dealing with dynamic participants. Involving multiple data generating techniques is also significant for maximised contribution.
Training is important for emerging PRA researchers in aspects such as handling data, working with large groups and/or groups with special needs.	Working with people is not an easy task generally, so on a professional basis one needs to be vigilant and adhere to ethical considerations. As a researcher, it is important to take participants serious and respect them enough by being professional and ethical.

Table N-9: Summary of silences identified in the data

Trend	Author (s) and year	Interpretive discussion
Non-inclusion of in-service training for new teachers in the system.	<ul style="list-style-type: none"> ❖ Khoaeane, 2012 ❖ Malak, 2013 	The possibility of pairing new teachers with experienced teachers for mentorship was not mentioned. Although some teachers had not received any inclusive education training and proclaimed that they required training, participants did not mention the need for mentorship.
Challenging aspects associated with PRA as applied research approach.	<ul style="list-style-type: none"> ❖ Chambers, 2008 ❖ Pain & Francis, 2003 	Participants did not refer to any challenges associated with PRA as research approach. Even though details of PRA was given to participants on inception of the study, they seemed to not be concerned by the challenges it presents.
Early identification and intervention of visual impairment.	<ul style="list-style-type: none"> ❖ WHO, 1992 ❖ Simeonsson & Rosenthal, 2001 ❖ American Foundation for the Blind, 2011 	In the results obtained, participants did not mention how visual impairment can be corrected, particularly when observed early in life.
Importance of involving the School and District Based Support Teams when supporting learners with visual impairment.	<ul style="list-style-type: none"> ❖ DBE, 2001 	SBST and DBST are part of the implementation of inclusive education in South Africa and they play an integral part when learners are referred internally and externally. Prior to the learner receiving any form of external support, these bodies need to be informed.
Development of a positive self-concept and stigmatisation.	<ul style="list-style-type: none"> ❖ Beaty, 1991 ❖ Datta & Talukdar, 2016 	Participants in this study did not make mention of learners with visual impairment developing a positive self-concept, which has potential to assist them achieve scholastically and improve social interactions.
Significance of feedback from people in the learners' environment.	<ul style="list-style-type: none"> ❖ Roe, 2008 ❖ Verdier, 2016 ❖ Kamal, 2017 	Learners with visual impairment, who may not have received orientation and mobility may rely on their peers for direction and feedback.
Enrolment of learners in schools that in close proximity to their homes.	<ul style="list-style-type: none"> ❖ DBE, 2001 ❖ Duhaney & Salend, 2000 	Learners with visual impairment need to be supported in all contexts of their development and learning, therefore it will be helpful for them to be enrolled in schools that are close to their homes so that their parents can also be involved.

Learners with special needs are said to fall under the people who are vulnerable group.	<ul style="list-style-type: none"> ❖ Cannon and Snyder, 2013 ❖ AER & COSB, 2019 ❖ Eckman, 2001 	Learners with disabilities need to be protected in every environment that they find themselves in. Their rights need to be respected at all times.
Additional issues associated with visual impairment.	<ul style="list-style-type: none"> ❖ Mosca, 2015 ❖ Tadic et al., 2010 ❖ Landsberg et al., 2005 	Beyond co-occurring disabilities with visual impairment, there are other important developmental considerations that needs to be attended to for the understanding of learners with visual impairment.
Expectations placed on learners with visual impairment to perform equivalent to their sighted peers.	<ul style="list-style-type: none"> ❖ MacArthur, 2004 ❖ Swart et al., 2004 	Learners with visual impairment, without intellectual disability, are expected to perform on par with other children, however this may call for accommodations and support from various stakeholders to be intensified.
Different types of visual impairment were not explored in this study.	<ul style="list-style-type: none"> ❖ Glass, 2002 ❖ Disability info South Africa, 2016 ❖ Department of Health, 2008 	In the findings of this study, participants referred to two types of visual impairment being blindness and partial sightedness (low vision), other types of visual impairment may have potential impact to learning.
Importance of transition for learners with visual impairment.	<ul style="list-style-type: none"> ❖ Calonge, 2004 ❖ Resnikoff et al., 2008 	It is deemed significant that learners who are gradually losing their sight be introduced to the use Braille. Learners with visual impairment are also required to be independent especially when venture into tertiary and world of work.
Conceptualisation and development of programme.	<ul style="list-style-type: none"> ❖ Leuders, 2016 ❖ Misko, 2015 	No use of typical approaches of programme development was mentioned by participants. Since no alternative suggestion was made, the intended approach for postgraduate qualification is then regarded as valuable.