



# EDUCATOR SUPPLY AND DEMAND IN THE WESTERN CAPE

**FEBRUARY 2009**

**Cape Higher Education Consortium  
Cape Peninsula University of Technology  
University of Cape Town  
University of the Western Cape  
University of Stellenbosch.  
For the Western Cape Education Department.**



**WESTERN CAPE  
Education Department**  
Provincial Government of the Western Cape





# CONTENTS

<b>TABLE OF CONTENTS</b>	i
<b>LIST OF APPENDICES</b>	iv
<b>LIST OF TABLES, FIGURES AND CHARTS</b>	v
<b>ACRONYMS AND ABBREVIATIONS</b>	xiv
<b>ACKNOWLEDGEMENTS</b>	xvii
<b>EXECUTIVE SUMMARY</b>	xxi
<b>CHAPTER 1: INTRODUCTION</b>	1
1.1 <b>Origin and background to this report</b>	1
1.2 <b>Aim and purpose of the report</b>	2
1.3 <b>Scope and rationale</b>	2
1.4 <b>Research approach and phases of the study</b>	3
1.4.1 Phase 1: Planning and preparation; situational analysis and literature review	4
1.4.2 Phase 2: Instrument design, data collection and sampling	5
1.4.3 Phase 3: Data validation, capturing, verification and analysis	6
1.4.4 Phase 4: Report writing	7
1.5 <b>Data collection instruments, sources and samples</b>	7
1.6 <b>Structure of the report and outline of chapters</b>	8
<b><u>PART 1: RESEARCH METHODOLOGY</u></b>	11
<b>CHAPTER 2: SITUATIONAL ANALYSIS AND WORKPLAN</b>	11
2.1 <b>Situational analysis</b>	11
2.2 <b>Workplan</b>	12
<b>CHAPTER 3: LITERATURE REVIEW</b>	15
3.1 <b>Introduction</b>	15
3.1.1 South Africa's teachers: a brief background	16
3.1.1.1 Teacher numbers	16
3.1.1.2 Teacher quality	17
3.2 <b>Key concepts and variables in the field of teacher supply and demand</b>	18
3.2.1 Demand	18
3.2.1.1 Policy developments	19
3.2.1.2 Finance	20
3.2.1.3 Enrolment trends	20
3.2.1.4 Learner/teacher ratio	21
3.2.1.5 Teacher age	21
3.2.1.6 Teacher attrition	22
3.2.2 Supply	23
3.2.2.1 Labour market issues	23
3.2.2.2 Teacher training	24
3.3 <b>Models</b>	28
3.4 <b>Relevant empirical research</b>	29
3.4.1 South African studies	29
3.4.1.1 Educator supply and demand in South African public schools	29
3.4.1.2 Educators	31
3.4.1.3 Teacher demand, supply, utilisation and costs	32

3.4.2	International studies	34
3.4.2.1	Teacher demand and supply: improving teaching quality and addressing teacher shortages	34
3.4.2.2	Investing in teacher quality: doing what matters most	36
3.5	<b>Variables and dimensions for the Western Cape study</b>	36
3.5.1	Demand	36
3.5.2	Supply	37
<b>CHAPTER 4: INSTRUMENTS AND DATA COLLECTION</b>		41
4.1	<b>Data collection instruments</b>	41
4.1.1	School and teacher-level data	41
4.1.1.1	Instrument development	43
4.1.1.1.1	Keys	44
4.1.1.2	Reliability and validity	52
4.1.1.3	Piloting	53
4.1.2	Student Survey	54
4.2	<b>Sampling frame</b>	54
4.3	<b>Data collection</b>	57
4.3.1	School and teacher level data	57
4.3.1.1	Fieldwork planning and training	57
4.3.1.2	School visits	59
4.3.1.3	Quality assurance	62
4.3.1.4	School Survey bulk email to WCED schools	63
4.3.2	Student teacher graduate data	63
4.3.2.1	HEI databases	64
4.3.2.2	HEI Student Survey	65
4.3.3	Potentially available people not currently employed in the sector	65
4.4	<b>Data processing</b>	65
4.4.1	Educator Questionnaire	65
4.4.1.1	Data validation and constraints	66
4.4.2	School and Student Surveys	67
4.5	<b>Data capture, cleaning and verification</b>	67
<b><u>PART 2: DATA ANALYSIS AND RESEARCH FINDINGS</u></b>		69
<b>CHAPTER 5: ANALYSING THE DATA</b>		69
5.1	<b>Sample used for the analysis</b>	69
5.1.2	School sample	69
5.1.3	Composition of the teacher sample	71
5.2	<b>Analysis of Educator Questionnaire data</b>	75
5.2.1	Qualifications	75
5.2.2	Matching subject specialisations and level with teaching assignment	76
5.2.2.1	Criteria for ‘acceptable subjects’ for each learning area or subject	80
5.2.2.2	Criteria for ‘acceptable’ school levels for each phase	83
5.3	<b>Analysis of School Survey data</b>	85
5.4	<b>Analysis of Student Survey data</b>	85
<b>CHAPTER 6: THE CURRENT TEACHING STOCK</b>		87
6.1	<b>Composition of the current teaching stock</b>	88
6.2	<b>REQV levels of current teaching stock</b>	91
6.2.1	Teacher age by REQV levels	95
6.2.2	Summary	97

6.3	<b>Teachers by qualification in learning areas/subjects for grade or phase taught</b>	98
6.3.1	Learning area/subject and phase or grade	99
6.3.1.1	Foundation Phase (Grades R-3)	100
6.3.1.2	Grades 5-9: Intermediate and Senior Phase	103
6.3.1.3	Grades 10-12: Further Education and Training	126
<b>CHAPTER 7: TEACHER RETENTION, ATTRITION, SHORTAGES, NEW ENTRANTS, AND POTENTIAL TEACHING STOCK</b>		197
7.1	<b>Age of present teaching stock</b>	197
7.1.1	Age by gender	197
7.1.2	Age by population group	199
7.1.3	Age by home language	202
7.1.4	Age by years teaching experience	204
7.1.5	Summary	205
7.2	<b>Teacher retention, attrition, turnover, recruitments, replacements, and difficult to fill posts by learning area and subject</b>	206
7.2.1	Retention	206
7.2.2	Attrition and turnover	207
7.2.3	Recruitments and replacements	206
7.2.4	Shortages and difficult to fill posts by learning area and subject	213
<b>CHAPTER 8: SOURCES OF TEACHER SUPPLY</b>		219
8.1	<b>Student teacher graduates</b>	219
8.1.1	2008 graduate students' intentions after qualifying	247
8.2	<b>Other people potentially available for teacher supply</b>	249
8.2.1	Unemployed whose study field is education, training or development	250
8.2.2	Labour force participation rate of people from the education field	253
<b><u>PART 3: MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS</u></b>		252
<b>CHAPTER 9: MAIN FINDINGS AND RECOMMENDATIONS</b>		257
9.1	<b>Recommendations for teacher supply and demand</b>	257
9.1.1.	Recommendations for the Western Cape Education Department	257
9.1.2	Recommendations for WCED and Higher Education Institutions	271
9.1.3	Recommendations for Higher Education Institutions	271
9.2	<b>Recommendations regarding systems</b>	272
9.2.1.	Recommendations for the Western Cape Education Department	272
9.2.2	Recommendations for the Cape Higher Education Consortium	273
9.3	<b>Conclusion</b>	273
<b>REFERENCES</b>		275
<b>APPENDICES</b>		279

## LIST OF APPENDICES

APPENDIX A	Details of investigations and processes: situational analysis and workplan	279
APPENDIX B	Fields currently available on PERSAL as supplied by PERSAL	290
APPENDIX C	Managing Teacher Demand and Supply: A Conceptual Framework	291
APPENDIX D	Number of Educator Questionnaires obtained from sample schools	292
APPENDIX E	GET subject framework – clusters of ‘acceptable’ subject specialisations	295
APPENDIX F	FET subject framework – clusters of ‘acceptable’ subject specialisations	301
APPENDIX G	Comparative data on the count of FET teachers in the Metro East schools, and the count in Eden and Central Karoo schools, <i>with</i> a first general degree, and the count with a first general degree as well as a professional qualification for teaching at the secondary school level	314
APPENDIX H	Graduates from the education field (Western Cape): Estimates of numbers employed in teaching occupations, and the broad LFPR	316

## LIST OF TABLES, FIGURES AND CHARTS

### TABLES:

Table 3.1:	Enrolment by grade in Western Cape public ordinary schools, 2006	21
Table 4.1:	Framework for teachers' qualifications, with examples	45
Table 5.1:	Sample school level	70
Table 5.2:	Former education department of public ordinary school sample	70
Table 5.3:	School sample quintiles for Eden and Central Karoo and Metro East	70
Table 5.4:	Principals' reports on sample school's settlement type	71
Table 5.5:	Number of WCED paid and privately funded teachers in sample	71
Table 5.6:	Number of EQs obtained from each sample school and the number of teachers employed at the school according to the School Survey	292
Table 5.7:	Number of WCED paid and privately funded teachers per Education District	72
Table 5.8:	Number of teachers (for the sample as a whole) with permanent and temporary WCED and SGB posts	73
Table 5.9:	Eden and Central Karoo – Number of teachers in the sample with permanent and temporary WCED and SGB posts	73
Table 5.10:	Metro East – Number of teachers in the sample with permanent and temporary WCED and SGB posts	73
Table 5.11:	Number of sample teachers from Primary, Intermediate, Combined, Secondary schools and Special schools	73
Table 5.12:	Number of sample teachers in WCED; ex-HoA; ex-HoR; ex-DET schools per District	74
Table 5.13:	Number of teachers per quintile school in each Education District	74
Table 5.14:	Sample teachers' reports on language/s most spoken at home	74
Table 5.15:	REQV levels and status	75
Table 5.16:	Levels of professional teaching qualifications applicable for grades	83
Table 5.17:	Principals' reports on school settlement type	85
Table 5.18:	Number of Student Surveys for analysis	85
Table 6.1:	Positions and posts held by sample teachers	89

Table 6.2:	Eden and East Karoo – Positions and posts held by the sample teachers	90
Table 6.3:	Metro East – Positions and posts held by the sample teachers	91
Table 6.4:	Number of Educators by REQV for Western Cape (PERSAL)	92
Table 6.5:	REQV levels as reported by teachers in the Educator Questionnaire and as per PERSAL	93
Table 6.6:	Eden and Central Karoo – REQV as reported by teachers in the Educator Questionnaire and as per PERSAL	94
Table 6.7:	Metro East – REQV levels as reported by teachers in the Educator Questionnaire and as per PERSAL	94
Table 6.8:	Number of teachers per age group by REQV as reported in the Educator questionnaire	95
Table 6.9:	Eden and Central Karoo – Number of teachers per age group by REQV as reported in the Educator Questionnaire	96
Table 6.10:	Metro East – Number of teachers per age group by REQV as reported in the Educator Questionnaire	96
Table 6.11:	Assessment of teacher to teaching field ‘match’	98
Table 6.12:	Levels of professional teaching qualifications applicable for grades	99
Table 6.13:	School level qualifications of teachers of Grade 1-3 classes	100
Table 6.14:	Number of FP classes by language of instruction, when English is the home language of the teacher	101
Table 6.15:	Number of FP classes by language of instruction, when Afrikaans is the home language of teacher	102
Table 6.16:	Number of FP classes by language of instruction, when isiXhosa is the home language of teacher	102
Table 6.17:	GET learning area counts and % profiles – Afrikaans Home Language and First Additional Language	105
Table 6.18:	GET learning area counts and % profiles – English Home Language and First Additional Language	107
Table 6.19:	GET learning area counts and % profiles – isiXhosa Home Language and First Additional Language	109
Table 6.20:	GET learning area counts and % profiles – Mathematics	111
Table 6.21:	GET learning area counts and % profiles – Life Orientation	113
Table 6.22:	GET learning area counts and % profiles – Natural Sciences	115
Table 6.23:	GET learning area counts and % profiles – Social Sciences	117

Table 6.24:	GET learning area counts and % profiles – Technology	119
Table 6.25:	GET learning area counts and % profiles – Economic and Management Sciences	121
Table 6.26:	GET learning area counts and % profiles – Arts and Culture	123
Table 6.27:	FET subject counts and % profiles – Afrikaans Home Language and First Additional Language	127
Table 6.28:	FET subject counts and % profiles – English Home Language and First Additional Language	129
Table 6.29:	FET subject counts and % profiles – isiXhosa Home Language and FAL	131
Table 6.30:	FET subject counts and % profiles – Accounting	133
Table 6.31:	FET subject counts and % profiles – Agricultural Management, Sciences and Technology	135
Table 6.32:	FET subject counts and % profiles – Business Studies	137
Table 6.33:	FET subject counts and % profiles – Civil Technology	139
Table 6.34:	FET subject counts and % profiles – Computer Applications Technology	141
Table 6.35:	FET subject counts and % profiles – Consumer Studies	143
Table 6.36:	FET subject counts and % profiles – Dance Studies	145
Table 6.37:	FET subject counts and % profiles – Design	147
Table 6.38:	FET subject counts and % profiles – Dramatic Arts	149
Table 6.39:	FET subject counts and % profiles – Economics	151
Table 6.40:	FET subject counts and % profiles – Electrical Technology	153
Table 6.41:	FET subject counts and % profiles – Engineering Graphics and Design	155
Table 6.42:	FET subject counts and % profiles – Geography	157
Table 6.43:	FET subject counts and % profiles – History	159
Table 6.44:	FET subject counts and % profiles – Hospitality Studies	161
Table 6.45:	FET subject counts and % profiles – Information Technology	163
Table 6.46:	FET subject counts and % profiles – Life Orientation	165
Table 6.47:	FET subject counts and % profiles – Life Sciences	167
Table 6.48:	FET subject counts and % profiles – Mathematical Literacy	169

Table 6.49:	FET subject counts and % profiles – Mathematics	171
Table 6.50:	FET subject counts and % profiles – Mechanical Technology	173
Table 6.51:	FET subject counts and % profiles – Music	175
Table 6.52:	FET subject counts and % profiles – Physical Sciences	177
Table 6.53:	FET subject counts and % profiles – Religion Studies	179
Table 6.54:	FET subject counts and % profiles – Tourism	181
Table 6.55:	FET subject counts and % profiles – Visual Arts	183
Tables 6.56 - 6.65	FET teachers of core subjects <i>with</i> a first general degree, and with a first general degree and professional qualification for teaching at the secondary school level, in quintile 5 and non quintile 5 schools	187
Tables 6.66 - 6.75	FET teachers of core subjects <i>with</i> a first general degree, and with a first general degree and professional qualification for teaching at the secondary school level, in Metro East and Eden and Central Karoo schools	314
Table 6.76:	Institutions where teachers obtained their qualifications and counts of qualifications per institution	192
Table 7.1:	Number of male and female teachers by age group	197
Table 7.2:	Eden and Central Karoo – Number of male and female teachers by age group	198
Table 7.3:	Metro East – Number of male and female teachers by age group	198
Table 7.4:	Number of teachers per age group by population group	199
Table 7.5:	Eden and Central Karoo – Number of teachers per age group by population group	200
Table 7.6:	Metro East – Number of teachers per age group by population group	200
Tables 7.7 - 7.9	Number of teachers per age group with isiXhosa as home language	202
Tables 7.10 - 7.12	Number of teachers per age group with English as home language	202
Tables 7.13 - 7.15:	Number of teachers per age group with Afrikaans as home language	203
Table 7.16:	Number of teachers per age group by years teaching experience	204
Table 7.17:	Eden and Central Karoo – Number of teachers per age group by years teaching experience	204

Table 7.18:	Metro East – Number of teachers per age group by years teaching experience	205
Table 7.19:	Teachers’ number of years at current school	206
Table 7.20:	Number of teachers who said they have actively applied for positions at other schools	207
Table 7.21:	Category information from School Surveys as to where teachers who left schools between January 2007 and August 2008, have gone	208
Table 7.22:	Teachers’ responses regarding their intention to remain in the teaching profession	209
Table 7.23:	Migrants from the educational or related fields (thousands of people)	209
Table 7.24:	Principals’ reports on posts filled at Senior Phase and FET level since January 2007 until August 2008	211
Table 7.25:	Principals’ reports on sources of high school teacher supply by learning area/subject	212
Table 7.26:	Principals’ reports on the number of inadequately qualified teachers	214
Table 7.27:	Additional qualified teachers that principals said their school still needed in 2008	215
Table 7.28:	Principals’ reports on high school teaching positions, between January 2007 and August 2008, where no appropriately qualified candidate could be found	216
Table 7.29:	FET subjects currently not offered at schools that principals most often said they would like to offer	216
Table 8.1:	IPET graduates/final year students 2006-2008: US, UWC, CPUT, UCT	220
Table 8.2:	University of Stellenbosch: B Ed (GET – Foundation Phase) graduates (2006-2008) by subject specialisation	221
Table 8.3:	University of Stellenbosch: B Ed (GET – Foundation Phase) (2006-2008 combined) graduates home language by subject specialisations	221
Table 8.4:	University of Stellenbosch: B Ed (GET – Foundation Phase) graduates (2006-2008 combined): age by gender	222
Table 8.5:	University of Stellenbosch: B Ed (GET – Intermediate and Senior Phase) and B Sc (Ed) graduates (2006-2008) by learning area/subject specialisations	222
Table 8.6:	University of Stellenbosch: B Ed (GET – Intermediate and Senior Phase) and B Sc (Ed) (FET) graduates (2006-2008 combined): home language by specialisation	222
Table 8.7:	University of Stellenbosch: B Ed (GET – Intermediate and Senior Phase) graduates (2006-2008 combined): age by gender	223

Table 8.8:	University of Stellenbosch: B Sc (Ed) graduates (2006-2008 combined): age by gender	223
Table 8.9:	University of Stellenbosch: B Ed (Psych) (2006-2008) graduates by learning area/subject specialisations	223
Table 8.10:	University of Stellenbosch: B Ed (Psych) (2006-2008) graduates home language by learning area/subject specialisations	224
Table 8.11:	University of Stellenbosch: B Ed (Psych) graduates (2006-2008 combined): age by gender	224
Table 8.12:	University of Stellenbosch: PGCE (FET) (2006-2008) graduates by learning area/subject specialisations	225
Table 8.13:	University of Stellenbosch: PGCE (FET) (2006-2008 combined) graduates home language by learning area/subject specialisations	226
Table 8.14:	University of Stellenbosch: PGCE (Secondary teaching) graduates (2006-2008 combined): age by gender	227
Table 8.15:	University of Stellenbosch: All education graduates (2006-2008 combined): age by gender	227
Table 8.16:	University of Western Cape: Education graduates (2006-2008): qualification by method subjects	228
Table 8.17:	University of the Western Cape: All education graduates (2006-2008 combined): age by gender	229
Table 8.18:	University of the Western Cape: All education graduates (2006-2008 combined): home language by gender	230
Table 8.19:	University of the Western Cape: B Educ (Arts) IV graduates (2006-2007 combined): age by gender	230
Table 8.20:	University of the Western Cape: B Educ (Arts) IV graduates (2006-2007 combined): home language by gender	230
Table 8.21:	University of the Western Cape: B Ed IV (GET – Senior Phase) graduates (2008): age by gender	231
Table 8.22:	University of the Western Cape: B Educ IV (GET – Senior Phase) graduates (2008): home language by gender	231
Table 8.23:	University of the Western Cape: PGCE (FET) graduates (2006-2008 combined): specified method subjects	232
Table 8.24:	University of the Western Cape: PGCE (Secondary teaching) graduates (2006-2008 combined): age by gender	233
Table 8.25:	University of the Western Cape: PGCE (Secondary teaching) graduates (2006-2008 combined): home language by gender	233

Table 8.26:	Cape Peninsula University of Technology: Foundation Phase B Ed graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation	234
Table 8.27:	Cape Peninsula University of Technology: Intermediate/Senior Phase B Ed graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation	235
Table 8.28:	Cape Peninsula University of Technology: B Ed Specialisation (FET) graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation	236
Table 8.29:	Cape Peninsula University of Technology: B Ed (FET) Economic and Management Science graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation	237
Table 8.30:	Cape Peninsula University of Technology: PGCE (GET – Foundation Phase) graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation	238
Table 8.31:	Cape Peninsula University of Technology: PGCE (GET – Intermediate and Senior Phase) graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation	239
Table 8.32:	Cape Peninsula University of Technology: PGCE (FET) (2006-2008): qualifications by gender, home language, teaching language and specialisation	240
Table 8.33:	Cape Peninsula University of Technology: All education graduates (2006-2008 combined) age by home language	241
Table 8.34:	University of Cape Town: PGCE (GET – Intermediate and Senior Phase graduates (2006-2008) by gender	242
Table 8.35:	University of Cape Town: PGCE (GET – Intermediate and Senior Phase graduates (2006-2008 combined): home language by gender	242
Table 8.36:	University of Cape Town: PGCE (GET – Intermediate and Senior Phase graduates (2006-2008) age by gender	242
Table 8.37:	University of Cape Town: PGCE graduates (2006-2008) by subject/ learning area specialisations	243
Table 8.38:	University of Cape Town: PGCE graduates (2006-2008 combined): specified method subjects	243
Table 8.39:	University of Cape Town: PGCE graduates (2006-2008 combined): gender by home language	244
Table 8.40:	University of Cape Town: PGCE graduates (2006-2008 combined): age by gender	244
Table 8.41:	University of Cape Town: PGCE graduates (2006-2008 combined): age by home language and gender	245

Table 8.42:	Students qualifying in 2008 (UCT, UWC, US, and CPUT combined): stated intention after qualifying	247
Table 8.43:	Students who said they have teaching posts in 2009 as at the end of October 2008	249
Table 8.44:	Previous occupations of the broad unemployed in the Western Cape	250
Table 8.45:	Characteristics of the unemployed by education study field in the Western Cape	252
Table 8.46:	Broad labour market status by field of study in the Western Cape	316
Table 8.47:	Broad labour market status of graduates from the education field by province	317
Table 8.48:	Graduates from the education field: Western Cape District Council percentages in each employment status category	318
Table 8.49:	Graduates from the education field, Western Cape: employment status percentages by District Council	319
Table 8.50:	Graduates from the education field, Western Cape: percentages of people from each area type in each employment status category	318
Table 8.51:	Graduates from the education field, Western Cape: employment status percentages within area type	318
Table 8.52:	Graduates from the education field, Western Cape: racial percentages within in each employment status category	318
Table 8.53:	Graduates from the education field, Western Cape: Employment status percentages within race	319
Table 8.54:	Graduates from the education field, Western Cape: Gender percentages within each employment status category	319
Table 8.55:	Graduates from the education field, Western Cape: Employment status percentages within gender	319
Table 8.56:	Graduates from the education field, Western Cape: Home language percentages within each employment status category	319
Table 8.57:	Graduates from the education field, Western Cape: Employment status percentages within home language	320
Table 8.58:	Graduates from the education field, Western Cape: Age group percentages within each employment status category	320
Table 8.59:	Graduates from the education field, Western Cape: Employment status percentages within age group	320
Table 8.60:	Graduates from the education field, Western Cape: Highest educational attainment percentages in each employment status category	321

Table 8.61:	Graduates from the education field, W Cape: Employment status percentages within highest educational attainment	321
Table 8.62:	Graduates from the education field, Western Cape: Broad LFPRs, unemployment rates and percentage employed in teaching occupations	322
Table 8.63:	Employed in teaching occupations by province, Census	323
Table 8.64:	Employed in teaching occupations by province, LFSs	324

### **FIGURES AND CHARTS:**

Chart 3.1:	Managing Teacher Demand and Supply: A Conceptual Framework	291
Figure 8.1:	Study fields of the broadly unemployed in the Western Cape, LFPRs	251
Figure 8.2:	Mean hourly wage rate of the three groups by years of educational attainment in the Western Cape (Rand, 2000 prices)	325
Figure 8.2:	Mean hourly wage rate of the three groups by years of educational attainment in the Western Cape (Rand, 2000 prices)	325

## ACRONYMS AND ABBREVIATIONS

ABET	Adult Basic Education and Training
ACE	Advanced Certificate in Education
B Ed	Bachelor of Education
CEMIS	Central Education Management Information System
CEO	Chief Executive Officer
CEPD	Centre for Education Policy Development
CHE	Council on Higher Education
CHEC	Cape Higher Education Consortium
CHED	Committee of Heads of Education
COTEP	Council on Teacher Education Policy
CPTD	Continuing professional teacher development
CPUT	Cape Peninsula University of Technology
DDG	Deputy Director General
DE	Diploma in Education
DEC	Department of Education and Culture (pre-1994)
DET	Department of Education and Training (pre-1994)
DoE	Department of Education
ECD	Early Childhood Development
EIS	EduInfor Search
ELRC	Education Labour Relations Council
ELSEN	Learners with special education needs
EMDC	Education Management and Development Centre
EMIS	Education Management Information System
EQ	Educator Questionnaire
EQP	Evaluation of Qualifications and Programmes
ESDA	Education Supply and Demand Audit
FDE	Further Diploma in Education
FET	Further Education and Training
FP	Foundation Phase
GET	General Education and Training
HC-LMS	Human Capital-Leave Management System
HDE	Higher Diploma in Education
HEI	Higher Education Institution
HEMIS	Higher Education Management Information System
HEQF	Higher Education Qualifications Framework

HoA	House of Assembly (pre-1994)
HoD	Head of Department
HoR	House of Representatives (pre-1994)
HSRC	Human Sciences Research Council
ICT	Information Communication Technology
IEP	Integrated Education Project
INSET	In-service Education and Training
IP	Intermediate Phase
IPET	Initial professional education of teachers
IT	Information Technology
JC	Junior Certificate
LFPR	Labour Force Participation Rate
LFS	Labour Force Survey
LOLT	Language of learning and teaching
L/T	Learner/teacher (ratio)
NGO	Non-governmental organisation
NIHE	Northern Institute for Higher Education
NPDE	National Professional Diploma in Education
NPFTED	National Policy Framework for Teacher Education and Development
NQF	National Qualifications Framework
NSE	Norms and Standards for Educators
NSFAS	National Student Financial Aid Scheme
OECD	Organisation for Economic Co-operation and Development
PDE	Primary Diploma in Education
PERSAL	Personnel & Salary System
PGCE	Post-graduate Certificate in Education
PID	Personal Information Data
PTC	Primary Teachers' Certificate
PTD	Primary Teachers' Diploma
REQV	Relative Education Qualification Value
SACE	South African Council for Educators
SAIDE	South African Institute for Distance Education
SDU	Schools Development Unit
SES	Socioeconomic status
SG	Superintendent General
SGB	School Governing Body
SP	Senior Phase

STD	Secondary Teachers' Diploma
TC	Teacher's Certificate
TIMSS	Trends In the International Mathematics and Science Study
UCT	University of Cape Town
UNISA	University of South Africa
UWC	University of the Western Cape
US	University of Stellenbosch
WCED	Western Cape Education Department

## ACKNOWLEDGEMENTS

The following individuals and institutions are acknowledged for their contribution and participation in the research for this report:

The Educator Supply and Demand Audit Oversight Committee comprising the Heads of Education: Professor Maureen Robinson, Dean of the Faculty of Education, Cape Peninsula University of Technology (CPUT); Associate Professor Rudi Laugksch, Director of the School of Education, University of Cape Town (UCT); Professor Zubeida Desai, Dean of the Faculty of Education, University of the Western Cape (UWC); Professor Yusef Waghid, Dean of the Faculty of Education, University of Stellenbosch (US); as well as Nasima Badsha, Chief Executive Officer, Cape Higher Education Consortium (CHEC); Erica Gillard, (CHEC); and Dr Sigamoney Naicker, Chief Director: Curriculum Development, Western Cape Education Department (WCED).

Professor Maureen Robinson acted as the chairperson of the committee. Professor Tim Dunne (UCT); Professor Sarie Berkhout (US); Dr Jan Heystek (US); Associate Professor Rob Siebörger (UCT); William Jantjies, Directorate: Human Capital Planning (WCED); and Sharon Cyster, Director: Human Capital Management (WCED), attended some committee meetings by invitation.

Dr Cheryl Reeves, senior researcher and overall coordinator of the research project, for her rigour and professionalism.

Overall support from Dr Sigamoney Naicker, Chief Director: Curriculum Development, who coordinated the study for the WCED.

Professor Tim Dunne, Department of Statistical Sciences (UCT), for his commitment in conducting the statistical data analysis.

Mary Monteith for her dedicated and meticulous research assistance.

The University of Cape Town's Schools Development Unit (SDU), in particular, Jerome Fortuin and Owen Kiewietz for their keen and enthusiastic arrangements pertaining to training venues, the recruitment of the fieldwork team members, and participation as quality controllers and data collection supervisors during school visits, and Joey Joubert who acted as an outstanding co-

ordinator, quality controller and data collection supervisor, for the school visits in Eden and Central Karoo Education District.

The fieldworkers who conscientiously collected the data at the schools.

- In Eden and Central Karoo – Carmen Abrahams, Adoline Anthony, Martin De Klerk, Muriel Engelbrecht, Morgan Ferus, Veronica Joubert, Leonora Loff, Macky Maart, Thandeka Meva, Wilfred Petersen, Avril Schneider, Thandi Sixaba, Johnny Smith, and Maude Solomons.
- In East Metro – Dawn Claassen, Pearl Erasmus, Gadija Jakoet, Nigel Jaftha, Jeanette Kronenberg, Janice Lawrence, Xolani Maholwana, Olive Malobola, Thembela Mbelwa, Cikizwa Mbombo, Phathiswa Ngoqo, Abdulrazarak Parker, Nokuzola Sigodi-Sika, Vernon Thomas, Kevin Wildschut, and Erica Williams.

Nigel Jaftha, Mary Monteith, Abdulrazarak Parker, Vernon Thomas and Kevin Wildschut who assisted with the taxing process of validating teachers' qualifications. Jeanette Kronenberg for her assistance with collating completed School Surveys.

Eileen Arnold, Marlene Titus and Marlene Scheepers from CHEC for administrative support.

Hilary Buchanan for her assistance with the layout of data-collection instruments and this report.

Jean Marie Sabwa, Thoutou Sayi and Charles Kasongo-Mbaya at UCT for their endurance in capturing the data.

Staff at the four Higher Education Institutions who provided information on education student graduates: Jane Hendry (UCT); Vincent Morta, Ulfah Booley, Carmelita Benjamin and Francois Hannibal (UWC); Rob Woodward, David Bleazard, Arina Wessels, Anthea Karra and Robert Meyer (CPUT); and Neil Grobbelaar and Leon Eygelaar (US).

Support from the WCED: Melvyn Caroline, Acting Chief Director Districts; Dr Abdurahman Noordien, Directorate: KM, IMS & ICT; Dr Andile Siyengo, Directorate: Research Services; Dr Ronald Cornelissen, Directorate: Research Services; William Jantjies, Directorate: Human Capital Planning; Sindy Mafanga-Kibi, Chief Director: Education Management Information & Quality Assurance; Fiona Lewis, Project Leader: Human Capital Development Strategy in Chief Directorate: Education Planning; Aneesa Basha, ICT Project Manager Chief Directorate e-Innovation Department of the Premier Provincial Government of the Western Cape; Shameemah

Begg, Applications Development Manager Centre for e-Innovation; Cluster: Education, Cultural Affairs and Sport Provincial Government of the Western Cape; and other officials, as well as District office management and staff in the two Education Districts where the fieldwork was conducted; Translation Services for translating the School Survey that was distributed to schools into Afrikaans; and Ursula Scheepers for assisting with the emailing of the School Survey to WCED schools.

Associate Professor Rob Siebörger (UCT), Tessa Welch, South African Institute for Distance Education; and Martiens Loots, Head of the Evaluation of Qualifications and Programmes Unit, Department of Education, for their advice on qualifications and related issues.

Critical readers: Nasima Badsha (CHEC), Professor Maureen Robinson (CPUT), and Professor Tim Dunne (UCT), for their contributions to this report.

Mary Monteith for editing the report.

Derek Yu and Professor Servaas Van der Berg, Department of Economics (US), who made available a report on the labour market status of the graduates whose study field is education, training or development in the Western Cape Province.

The cooperation of the WCED schools in the main study and in the pilot phase where fieldwork was conducted; particularly those teachers and senior staff who so generously participated and gave of their time, and especially for providing copies of their qualifications; all school principals who completed and returned the School Survey forms. The identities of participating schools and staff are confidential.

The authors of the report:

- **Dr Cheryl Reeves**, senior researcher, who coordinated the research, and who authored large parts of the report and integrated its different sections.
- **Professor Tim Dunne**, Head of Department, Statistical Sciences (UCT), who analysed much of the data.
- **Dr Monica Bot** who wrote the literature review.
- **Mary Monteith** who provided input for the report as a whole.



## EXECUTIVE SUMMARY

The *aim* of this report is to provide insight into the current educator supply and demand profile for the Western Cape and to support policy and planning.

The *objective* is to assist the Western Cape Education Department (WCED) and the four Higher Education Institutions (HEIs) responsible for teacher education in the Western Cape to respond to educator supply and demand needs.

### 1. RESEARCH QUESTIONS

The *main research question* for the study was:

*Does the Western Cape Education Department currently have sufficient qualified educators appropriately deployed in its public schools?*

*Sub-questions* were:

- Does the current profile of educators employed within the WCED schools meet the requirements of all learning areas/subjects and language requirements of the National Curriculum Statement?
- To what extent is there a match between the qualifications of both WCED paid and School Governing Body (SGB) employed educators with their current teaching responsibilities?
- To what extent is there an over-supply or under-supply of qualified educators, per phase and per learning area/subject? Where do gaps currently exist?
- What relationships exist between the qualifications of educators and other characteristics of the school, including the quintile<sup>1</sup> of the school, the pass rate, learner performance, and the home language of the majority of the learners? Are appropriately qualified educators equally distributed across different types of schools?
- What is the educator turnover per phase and per learning area/subject?
- How does current enrolment and graduate output in initial teacher education match the need for educators in particular phases/learning areas/subjects? How many graduates are actually making themselves available for employment as WCED teachers?

---

<sup>1</sup> A school's quintile is largely determined by the relative poverty of the surrounding community. The measure of community poverty is based on individual and household incomes from Statistics SA data.

## 2. RESEARCH METHODS

Research methods included:

- **A literature review** to identify and cover definitions of key concepts and different models of teacher supply and demand; empirical findings from related research; criteria; and variables and procedures used to measure supply and demand.
- **A situational analysis** undertaken to ascertain the availability and extent of the relevance of existing WCED data to determine how much of the existing information was useful for the purposes of the study.
- **Data collection** which included *four main activities* using *three main data collection instruments* developed for the study:
  1. Direct visits to a *sample* of schools in two of the eight new WCED Education Districts<sup>2</sup> to conduct paper-based data collection on teachers' qualifications and their subject and phase specialisations, and the grades and learning areas/subjects which the teachers taught in 2008, through the use of an *Educator Questionnaire*.
  2. Sending a *School Survey* via the WCED bulk email facility and post to all public ordinary and special schools in the province to obtain information on teacher retention, attrition, recruitments, replacements, shortages and difficult to fill posts.
  3. Gathering student data from the four Western Cape HEIs on the phase and curriculum specialisations and language/s of instruction profiles of students graduating with a four-year B Ed or a Post-graduate Certificate in Education<sup>3</sup> in 2006, 2007 and 2008.
  4. Administration of a *Student Survey* to all 2008 final year IPET (initial professional education of teachers) students at the four HEIs to establish a) the intentions of these potential new entrants into the workforce once they have completed their studies; and b) whether they have a teaching post for 2009.
- **Data analysis and synthesis** using the following as main *sources*:
  - Educator Questionnaire data on 4 545 teachers at 151 sample schools to analyse the match between teachers' subject specialisations and level with their teaching assignments.<sup>4</sup>
  - School Survey data received from 641 ordinary and special public schools (comprising 144 of the sample schools visited by fieldworkers and 497 of the schools

---

<sup>2</sup> The four urban Education Districts are: Metro North, Metro South, Metro East, Metro Central; and the four rural Education Districts are: West Coast, Cape Winelands, Eden and Central Karoo, and Overberg.

<sup>3</sup> The PGCE follows an appropriate first degree (for example, BA/BSc). It is to be replaced by an Advanced Diploma in Education (ADE). Both the four-year B Ed and the PGCE are recognised at REQV 14 level.

<sup>4</sup> According to 2008 PERSAL data, there were 30 640 WCED employed teachers in all.

that responded to the bulk email/posted survey – approximately 42% of the whole population of schools in the Western Cape).<sup>5</sup>

- Student Survey data on 656 of the 2008 final year education students at the four HEIs.
- Data on 2 736 IPET graduate students for 2006, 2007 and 2008 provided by the four HEIs.<sup>6</sup>
- A report (Yu, 2008) from the Department of Economics, University of Stellenbosch, which used the Labour Force Surveys (LFSs) and census data as sources to identify the number of people in the Western Cape who studied education and/or had previous jobs in education but who are not currently employed in the sector (i.e. potentially available people for teacher supply).

### 3. TIMEFRAME

The study comprised four main phases:

**Phase 1 May - June 2008:** Planning and preparation.

- Situational analysis and commissioning of the literature review.

**Phase 2 July - November 2008:** Instrument design, sampling and data collection.

- School visits to the sample of schools took place 11-28 August 2008.
- The School Survey was sent via the WCED bulk email facility and posted to all WCED public ordinary and special schools in the province at the beginning of September 2008, for return mid-September.
- The Student Survey was distributed at the end of August 2008 to the four HEIs to administer through their own channels and returned by 10 November 2008.
- IPET graduate student data for 2006, 2007 and 2008 was received from the four HEIs before the end of November 2008.

**Phase 3 October - December 2008:** Data validation, capturing, verification and analysis.

**Phase 4 December 2008 - January 2009:** Report writing.

---

<sup>5</sup> According to WCED information provided in January 2008, there were 1 451 public ordinary schools in the Province – 313 secondary schools, 41 combined schools, 177 intermediate schools, and 920 primary schools. There are approximately 67 public special schools in the Province.

<sup>6</sup> This count includes 88 students from the Northern Institute (NIHE) in the Northern Cape. UWC acts as an accrediting institution for the NIHE and was not able to separate the details of NIHE students from the details of UWC students.

#### 4. SAMPLE: MATCHING TEACHERS' QUALIFICATIONS WITH THEIR TEACHING ASSIGNMENTS

The sampling of schools for data on teachers' qualifications and their subject and phase specialisations was limited to two of the eight new WCED Education Districts in order to work within the project's budget and timeline. A decision was taken to select one rural and one urban Education District that the WCED considered relevant in relation to teacher supply and demand; findings could be extrapolated for these two districts. A proportional random sample of 151 schools was drawn from:

- the *Eden and Central Karoo Education District* which includes schools situated in and around towns such as Beaufort West, Herbertsdale, Laingsburg, Heidelberg, Uniondale, Albertina, Oudtshoorn, Riversdale, Ladismith, Pacaltsdorp, Murraysburg, Prince Albert, Mossel Bay, George, Knysna, and Plettenberg Bay.
- the *Metro East Education District*, which includes schools situated in and around areas such as Khayelitsha, Eersterivier, Blackheath, Kraaifontein, Bellville, Gordons Bay, Somerset West, and Strand.

Sampling took into account factors which WCED officials considered relevant. These included poverty quintiles (as measures of community poverty); distance from urban centres; and school size.

The sample of *Eden and Central Karoo* schools comprised 78 public ordinary schools (35% of ordinary schools in the rural Education District). The sample of *Metro East* schools selected comprised 72 public ordinary schools (53% of ordinary schools in the urban Education District) and 1 special school (10% of the special schools in the district).<sup>7</sup>

Table 1 shows the number of sampled schools per poverty quintile in each of the two Education Districts (according to WCED data provided). Quintile 5 schools are the least poor schools. Quintile 1 schools are the poorest schools. However, the middle range schools (quintiles 2-4) often attract significant numbers of learners from poorer backgrounds living in adjacent poorer areas such as informal settlements, which should properly be quintile 1 areas.

**Table 1: School sample quintiles for each Eden and Central Karoo and Metro East**

Quintiles	1	2	3	4	5	Total
Eden and Central Karoo	11	17	19	18	13	78
Metro East	0	7	29	4	33	73
<b>Total</b>	<b>11</b>	<b>24</b>	<b>48</b>	<b>22</b>	<b>46</b>	<b>151</b>

<sup>7</sup> According to WCED data available on 30 April 2008, there were 229 public ordinary schools and 5 special schools in the Eden and Central Karoo Education District. There were 136 public ordinary schools and 10 special schools in Metro East Education District (that is, a total of 15 special schools in the two Education Districts).

All Grade R-12 teachers at the schools, WCED paid as well as teachers in SGB posts, were included in the study. Teacher assistants were, however, not included in the brief for the research.

The sample of responding teachers comprised 2 027 teachers from the 78 schools in Eden and Central Karoo, and 2 518 teachers from the 73 schools in Metro East. The number of non-respondents is estimated as 317 (8%) of the sampled teacher population. Table 2 provides the number of teachers who reported in the Educator Questionnaires that they were paid by the WCED, and the number who said their posts were privately funded.

Data from the Educator Questionnaires in Table 2 indicate that 486 (11%) of the 4 545 teachers in the actual sample are privately-paid, whilst 4 045 (89%) are paid by the WCED.

**Table 2: Number of WCED paid and privately funded teachers in sample**

WCED paid	4045
SGB paid	482
'Other special funder'	4
Don't know	8
Missing response	6
<b>TOTAL</b>	<b>4545</b>

## **5. DATA ANALYSIS: MATCHING TEACHERS' QUALIFICATIONS WITH THEIR TEACHING ASSIGNMENTS**

A criticism of most supply and demand studies conducted in South Africa has been that the *real* demands of schools and the system are hidden. This is argued because the aggregated data used do not capture the extent to which teachers are teaching out of their fields of specialisation, and/or at levels of schooling for which they were not trained.

A crucial dimension of this study and a major challenge related to data analysis was determining whether or not existing teachers in WCED schools are 'adequately' qualified in terms of *formal accreditation for the teaching of a learning area/subject in a particular phase/grade (i.e. specialisation in the subject, learning areas and or phases that they are expected to teach)*.

Assessing this 'match' of qualification and specialisation with current teaching roles presented a particular challenge because of the new system and changed curriculum. For example, most of the current cohort of teachers were trained as pre-primary (Grade R and below), junior primary (Grade 1-Std 1/Grades 1-3), senior primary (Std 2-5/Grades 4-7), lower secondary (Std 6-8/Grades 8-10), or secondary teachers (Std 6-10/Grades 8-12); rather than for Foundation Phase (Grades R-3), Intermediate Phase (Grades 4-6), Senior Phase (Grades 7-9), or Further Education and Training (FET) (Grades 10-12) levels. Furthermore, some of the General Education and

Training (GET) learning areas that are taught in the Intermediate and Senior Phase, such as Social Sciences, now integrate one or more of the subjects or areas (History and Geography) that teachers studied in the past, into one learning area. At the FET level, a number of ‘newer’ more work-related subjects have also been introduced, for example, Computer Applications Technology.

Cognisance also had to be taken of the challenges facing schools, and the Education Department, in allocating and timetabling existing teaching staff at schools with subject specialisations obtained under a different system into new areas of the school curriculum. For example, Life Orientation covers Physical Education, Health Education, HIV/AIDS Education, Religion Studies and Career Guidance. Teachers have usually covered some, but rarely all, these subjects or areas in their qualifications. Thus, for the study, a fairly comprehensive and broad range of ‘specialisations’ and related subjects, applicable to each learning area or FET subject and phase level, had to be considered in the ‘matching’ dimension of the data analysis. For example, for Grades 10-12, ‘acceptable’ levels of professional teaching qualifications for the analysis included Secondary, Upper Secondary, Senior Phase and/or Further Education Training qualifications.

## **6. MAIN FINDINGS AND RECOMMENDATIONS**

The study has been able to respond in varying degrees to the research question and sub-questions outlined in Section 1. of this Executive Summary. These responses are contained in the recommendations that follow. However, it must be emphasised that the findings emerging from the study, and reported on below, are indicative rather than representative of the entire school and teacher population in the Province. External validation of the findings can only happen once collection of data on the entire population of WCED schools and teachers has taken place via the WCED’s online systems.

Section 6.1 below summarises the main findings and some of the implications of these findings; it makes a set of recommendations to the WCED and HEIs in the Western Cape around *teacher supply and demand*.

Section 6.2 outlines recommendations for the WCED and the Cape Higher Education Consortium (CHEC) Board in relation to setting up *systems for the future*.

### **6.1 Recommendations for teacher supply and demand**

There are **THREE** sets of recommendations, one for each of the following:

- Western Cape Education Department (6.1.1)

- Western Cape Education Department and the four Western Cape Higher Education Institutions (6.1.2)
- Higher Education Institutions (6.1.3).

### **6.1.1. Recommendations for the Western Cape Education Department**

The following **FOURTEEN** recommendations for teacher supply and demand are linked to the main findings. Each of the fourteen recommendations is preceded by a paragraph that summarises the issue under discussion. Findings and recommendations are organised into six focus themes:

1. Meeting formal REQV Requirements
2. Matching teachers to posts
3. Teacher professional development
4. Teacher retention and mobility, and employment equity
5. Strengthening the teacher pool
6. The impact of language and demographic shifts.

#### **THEME 1: Meeting formal REQV requirements**

*According to Norms and Standards for Educators (DoE, 2000a) the current minimum qualification requirement to be considered 'qualified' is the Relative Education Qualification Value (REQV) 13 level or a three-year post-school qualification (M + 3). The current definition of 'under-qualified' is REQV 12 or lower. However, in future the requirement will be REQV level 14, that is, M + 4 and teachers at REQV 13 will also be evaluated as 'under-qualified'.*

#### **Finding 1**

According to 2008 PERSAL data (SAIDE, 2008) about 5% of Western Cape teachers are unqualified or under-qualified (M + 1/2) in terms of *current* requirements. However, 10 245 WCED employed teachers (out of 30 640) are un- or under-qualified in terms the *future* requirement of M + 4. This count implies that 33% will be under-qualified. Analysis of the Educator Questionnaire data suggest that around one quarter (26%) of the sample teachers between the age of 30-49 and about a third (34%) of the 50-59 age group will need to upgrade their qualification in terms of future (M + 4) requirements. Data indicate that there are teachers in both Metro East and Eden and Central Karoo Education Districts who need to upgrade their qualifications from M + 3 to M + 4. The proportion of teachers in the *rural* district who need to upgrade their qualifications for future requirements is, however, higher than the proportion of teachers in the *urban* district.

**RECOMMENDATION 1: WCED needs to plan for teacher professional development to address the upgrading of un- and under-qualified teachers, especially in terms of future requirements (M + 4), with priority given to teachers in the 30-49 age group. Access to in-service opportunities for rural teachers to upgrade their qualifications for new requirements needs to be ensured.**

## **THEME 2: Matching teachers to posts**

*Whilst a teacher's REQV is useful for the purpose of determining whether the teacher has formal accredited or recognised qualifications and is not un- or under-qualified in terms of the minimum qualification currently required (i.e. REQV 13 level), the REQV level on its own does **not** indicate whether or not teachers are 'adequately qualified' for the teaching of a learning area/subject in a particular phase/grade (i.e. specialisation in the learning areas, subject and or phases that they are expected to teach). One of the main foci of the data analysis for this study was the actual match between teachers' subject specialisations, and the school level they were trained to teach according to their qualifications, with their current teaching responsibilities.*

### **Finding 2**

The study found that schools have to grapple with allocating and timetabling existing teaching staff with subject specialisations obtained under a different system, into new areas of the school curriculum. As a first layer of data analysis for matching teachers to posts, a team examined information provided in each Educator Questionnaire (administered to the sample of teachers) to assess the degree of 'match' between each teacher's qualifications and the grades and learning areas/subjects teachers reported that they were teaching in 2008. This assessment of teacher to teaching field 'match' suggests that about 84% of the sample of teachers were teaching, at least partially, within their field of expertise or field of study. Researchers also noted that some teachers were clearly employed in posts on the basis of their informal INSET training, or other training they had received, for example, training in computer literacy.

However, the researchers also noted that some schools do not appear to be using the current stock of teachers effectively or efficiently (for example, teachers with subjects in short supply are not always teaching these learning areas/subjects in the schools, and some teachers are expected to teach too many learning areas). There was also some evidence of un- or under-qualified or inappropriately qualified people being employed in SGB posts. Indications are that, in the absence of specific requirements/criteria for subject and school level teaching, principals and school leadership (who have the task of assigning teachers in the timetabling), and SGBs (who have the power to appoint people in SGB paid posts and to recommend teachers for employment by the

WCED) do not always have the necessary knowledge to make the appropriate placements or allocations.

**RECOMMENDATION 2: In order to ensure that teachers are assigned to teaching grades and learning areas/subjects that they are qualified to teach:**

- There is a need for clearer criteria for the teacher qualifications required for each learning area/subject at each phase so that mechanisms for matching teachers to posts can be firmly put into place.
- There needs to be school leadership and SGB training around the importance of subject specialisations and appropriate qualifications, and in managing teacher allocations well, especially in quintile 1-4 schools.
- The Department needs to consider the implications of the wide range and integrated nature of the GET learning areas offered.

### **THEME 3: Teacher professional development**

*The changing parameters of the qualifications required around school levels and aspects of the curriculum mean that the existing stock of teachers in the system is not always appropriately qualified for current curriculum needs. The study used the learning area/subject and grade level as the unit of analysis to establish which GET learning areas/FET subjects are most commonly taught by teachers who are teaching **out-of-field** or area of specialisation or level of professional teaching qualification. The analysis also established what subject specialisations teachers, deemed to be teaching **within their field of expertise**, most commonly have (for example, to establish the extent to which teachers with 'appropriate' subject qualifications to teach Arts and Culture tend to have Music, or Art, or Dance, or Drama in their qualifications).*

#### **Finding 3**

Findings from Educator Questionnaire data are that reduced capacity in subject expertise is most evident amongst teachers in the Intermediate/Senior Phase or middle school years for the 'newer' more integrated learning areas of Economic and Management Sciences and Arts and Culture. Teachers reported spending more time preparing for teaching because of having to teach new learning areas but also because of *dimensions* of learning areas/subjects that are out of their field of training.

From the data analysis of the GET learning areas where intermediate and senior teachers are teaching *within their field of expertise*, the following patterns emerge regarding the subjects covered in their qualifications:

- teachers teaching Natural Sciences more commonly have Biology as a subject in their qualifications than Physical Sciences
- teachers teaching Social Sciences more commonly have History than Geography
- teachers teaching Economics and Management Sciences more commonly have Accounting, Economics or Business Economics rather than Business Studies
- teachers teaching Life Orientation most commonly have Bible Studies, before Psychology/Guidance and Counselling and Physical Education/Human Movement Studies
- teachers teaching Technology more commonly have Technology (in general), Home Economics or Needlework and Dressmaking or Computer Literacy rather than Technical Drawing/Design, Metal/Woodwork, or Electrical or Mechanical Technology
- teachers teaching Arts and Culture most commonly have Music, then Art and Crafts, then Human Movement Studies rather than Fine Arts, Drama or Dance *per se*.

Data from the Educator Questionnaires on the subject specialisations, that FET teachers teaching *within their field of expertise* more commonly have, for teaching the ‘newer’ or more work-related FET subjects, indicate that:

- teachers teaching Agricultural Sciences more commonly have Biology than Agricultural Sciences
- teachers teaching Civil Technology more commonly have Computer Applications Technology than Technical/Building Drawing
- teachers teaching Computer Applications Technology more commonly have Typing than Computer Studies/Information Technology
- teachers teaching Consumer Studies more commonly have Business Economics/Economics, and then Needlework or Home Economics, rather than Business Studies/Marketing
- teachers teaching Dance Studies more commonly have Human Movement Studies than Dance *per se*
- teachers teaching Design more commonly have Art than Graphic Art/Art Design
- teachers teaching Engineering, Graphics and Design more commonly have Technology (in general) than Technical/Engineering Drawing or Design Technology
- teachers teaching Information Technology more commonly have Information Literacy than Information Technology or Computer Studies
- teachers teaching Life Sciences most commonly have Biology
- teachers teaching Life Orientation most commonly have Bible Studies, then Psychology/Guidance before Physical Education

- teachers teaching Mechanical Technology more commonly have Technology (in general) than Mechanical Technology or Engineering Technology
- teachers teaching Religion Studies more commonly have Bible Studies or Scripture than Religion Studies
- teachers teaching Tourism more commonly have History than Geography
- teachers teaching Visual Arts more commonly have Art (Practical) than Art Design.

The above have implications for teacher in-service and upgrading programmes.

**RECOMMENDATION 3: Where learning areas or subjects ideally require more than one subject specialisation, identified gaps in content knowledge should be addressed through appropriate and targeted professional development courses.**

### **THEME 3 (contd)**

*An important assumption underpinning this study is that **subject matter knowledge** is key for successfully teaching a particular subject. Whilst limited associations in international research have been found between teacher qualifications and learning outcomes assessed through pass rates or results of systemic testing (Boe and Gilford, 1992); in South Africa, a study by Crouch and Mabogoane (2001) identified teacher qualifications as strongly correlated with matric results. The Progress in International Reading Literacy Study (PIRLS) 2006 also found that learners taught by Language teachers who reported having post-graduate degrees showed an ‘improved overall mean performance’ in comparison to learners whose teachers were not as well qualified (Howie et al, 2007). Furthermore, analysis of data from the Southern (& Eastern) Africa Consortium for Monitoring Educational Quality II (SACMEQ II) by Van der Berg (2005:69) showed that, in South Africa, and in the Western Cape in particular, children in affluent or ‘least poor’ schools ‘the top layer of schools (historically white and Indian schools)’ performed significantly better than children in ‘schools with a lower mean SES [lower socioeconomic status] (historically black schools)’.*

*A particular interest of the study was to establish whether classes in higher-poverty schools are more often taught by teachers teaching out of their subject field and school level professional qualification. Thus, included in the data analysis is comparative data on quintile 5 schools (the least poor schools) as compared to non-quintile 5 schools (i.e. quintile 1-4 schools combined).*

#### **Finding 4**

Educator Questionnaire data suggest that in the *middle school years* (in particular in the Intermediate Phase) learning areas such as Mathematics and Natural Sciences are being taught by teachers who teach at grade levels *beyond their levels* of subject expertise. The cumulative nature of these knowledge domains means that teacher *under-preparedness* at the middle school level may be contributing to a cumulative deficit in learners' achievement in later grades. The data suggest that the situation in the quintile 5 and quintile 1-4 schools in 2008 was not very different.

Educator Questionnaire data indicate that, in 2008, the *core FET subjects* of Afrikaans, English, isiXhosa, Geography, History, Life Sciences, Mathematics, Mathematical Literacy and Physical Sciences were mostly taught by teachers who have a major or at least a minor course in the subject they were teaching (as opposed to out-of-field teaching). Core subjects in quintile 5 and non-quintile 5 schools were mostly taught by teachers who have a major or at least a minor course in an 'acceptable' subject for the subject they were teaching. However, the proportion and percentage of teachers with a major or a minor subject *and acceptable professional teaching qualification to teach at the FET level* is lower than the proportion with an acceptable subject in a qualification (generally, approximately 20% lower). For example, data suggests that 95% of Grade 10 Mathematics teachers have Mathematics as a subject in their qualifications but only 78% of these teachers also have a professional teaching qualification for teaching at the FET level. The data suggest that the situation with regard to core subjects in the quintile 5 and non-quintile 5 schools in 2008 was not very different.

Researchers who examined the Educator Questionnaire data noted that the careers of teachers trained in education departments other than the House of Assembly (HoA), called in the Western Cape the Cape Education Department (CED), have tended to exhibit a more 'circuitous' route to reach an equivalent qualification level or destination. For example, whilst many House of Assembly trained FET level teachers currently employed started off with a 3-year general degree and a 1-year Postgraduate Diploma in Education<sup>8</sup>; teachers trained in other education departments often started with a 2/3-year teaching certificate or diploma. In some cases such qualifications were followed by a first general degree; in others a teaching certificate or diploma was followed, through recognition of prior learning, by a 1-year full-time (or 2-year part-time) B Ed or a B Tech (Ed) conversion to a degree. Such qualification routes mean that some secondary school teachers have a 'conversion B Ed' but do not have a first general degree. Others have obtained an Advanced Certificate of Education (ACE). Some teachers with general degrees have primary professional qualifications obtained prior to their degree but no secondary teaching qualifications,

---

<sup>8</sup> For an explanatory framework of teachers' qualifications, with examples refer to Table 4.1 in Chapter 4 of the main report.

or have post-graduate qualifications after their degree that are not specifically professional 'secondary' teaching qualifications.

To further explore a possible association between the school-level socioeconomic status and teacher qualifications, we compared data from the Educator Questionnaires on teachers of core FET subjects in the quintile 5 schools and non-quintile 5 schools, *with* a first general degree, and with a first general degree as well as a professional qualification for teaching at the secondary school level.

This investigation suggests that, whilst evidence from the Educator Questionnaire is that most teachers have a qualification with a course in the FET core subject they teach, a greater proportion of teachers *with a first general degree* (and with a first degree and secondary qualifications) are teaching core FET subjects in quintile 5 schools than in schools in quintiles 1-4 combined. This finding indicates inequity between higher-poverty and more affluent schools in the distribution of more highly specialised teachers of core subjects (Afrikaans, English, isiXhosa, Geography, History, Life Sciences, Mathematical Literacy, Mathematics, and Physical Sciences).

**RECOMMENDATION 4: The issue of equivalent qualifications and a common curriculum structure will be addressed in future through a single Higher Education Qualification Framework (HEQF). However, it is important that the focus of ongoing professional development for middle and secondary school in-service teachers, especially those teachers without first degrees in the core subjects/learning areas they teach, is on deepening their content knowledge. To achieve this deepening the capacity and expertise to deliver curriculum-based in-service support to teachers needs to be in place.**

### **THEME 3 (contd)**

*The importance of **Grade R** teachers who are properly prepared and trained to develop early literacy skills in schools serving low socio-economic communities cannot be underestimated. Without competent Grade R teachers, learners who come from home environments which are not supportive of early literacy skills are more likely to enter Grade 1 under-prepared with the skills that ought to be developed during this pre-school year. The achievement gap between these learners and children who enter Grade 1 with well-established literacy skills is more likely to widen through primary schooling.*

*It is the intention of the national Department of Education (DoE) to extend Grade R to all primary schools by 2010, so that it becomes part of the compulsory schooling phase. In 2006,*

*there were 31 836 learners in Grade R in Western Cape public ordinary schools, which represented only 35% of Grade 1 enrolment (DoE, 2008, see literature review, Chapter 3).*

### **Finding 5**

The analysis of the Educator Questionnaire data showed that the sample teachers reported teaching a total of 108 **Grade R** classes. Teachers of 48 (44%) classes did not appear to have any appropriate qualifications for teaching at the Grade R level. In other words at least 40% of the Grade R classes in the sample schools apparently have teachers without appropriate training or specialisation to teach the reception year.

**RECOMMENDATION 5: WCED needs to take in account the challenge of Grade R teachers without appropriate qualifications and training in departmental planning, so that the pre-school benefits of Grade R are optimised.**

### **THEME 4: Teacher retention and mobility, and employment equity**

*The School Survey asked questions about teacher attrition, recruitments, replacements, shortages, and difficult to fill posts by learning area specialisations and subject.*

### **Finding 6**

There appear to be issues around the availability, distribution and retention of the most highly qualified and most experienced teachers (the two main factors influencing appointment decisions and by implication teacher demand), particularly in the areas of Mathematics, English, Afrikaans, and the Sciences (Physical Sciences, Natural Sciences and Life Sciences).

Data from the School Survey suggests that primary and high schools are largely using the existing WCED stock to replace teachers who leave or to fill vacant posts. Teachers are leaving one school for another, and, in high schools, data suggest that mobility amongst teachers is higher amongst Mathematics and English and Afrikaans teachers. Such mobility may be contributing to inequity in the distribution of teachers in these subjects. Data from the Educator Questionnaires suggest that the choice of more specialised teachers in core FET subjects is not to teach in higher-poverty schools.

School Survey data suggest mobility within the system but also migration into the private sector as well as early retirement amongst teachers in their 50s. Data from the School Surveys suggest that the highest proportion of WCED- and SGB-paid teachers who left the profession, left to take up positions outside of the teaching profession (attrition). The next highest proportion of WCED-paid teachers left because they were retiring (attrition). This group is followed by teachers (both

SGB- and WCED-paid) who left either to take a post at the same level at another WCED school in the same or another district in the Western Cape (turnover or mobility within the system). This information is important, as a high staff turnover can impact on continuity thereby limiting the impact of costly long-term school development plans put in place to improve learner performance. With regard to poor teacher morale, some of the most often cited reasons in the Educator Questionnaire include administrative overload and poor working conditions, as well as a lack of career progression and other promotion opportunities.

**RECOMMENDATION 6: The focus needs to be on retaining the most highly experienced high calibre teachers in the teaching force.**

- **What needs further investigation is where mobility across schools and where attrition from the teaching profession is greatest. For example, is migration from the profession (attrition rates) more pronounced in quintile 5 or quintile 1-4 schools and are teachers in higher poverty schools more inclined to move to other schools (mobility rates)? Are more highly specialised teachers moving from quintile 1-4 schools to quintile 5 schools?**
- **Causes of mobility (for example, of more effective teachers from higher poverty quintile 1-4 schools to historically more affluent quintile 5 schools) and ‘migration’ (for example, early retirement or migration to the private sector) of good quality teachers need to be further investigated and addressed.**
- **Suggested strategies for retaining effective teachers, besides the strengthening of curriculum-based career pathways, include incentives and perks such as study or long leave.**

### **Finding 7**

On the one hand, there is a need to develop strategies to attract, channel and retain more experienced and highly qualified teachers and high calibre new entrants who specialised in high priority subject knowledge areas into the *higher poverty schools*. On the other hand, a factor that was mentioned by principals in the School Survey as an obstacle to *Employment Equity* in quintile 5 schools is difficulty in attracting good quality teachers from different population groups. Some principals indicated that, if support is not in place, teachers who are placed in schools that differ from those to which they are accustomed, may feel alienated and leave teaching altogether.

**RECOMMENDATION 7:** The suggestion is that groups of good quality new entrant or experienced effective teachers of core subjects (rather than one or two individuals) be strategically recruited or placed in carefully selected schools (specifically higher poverty schools which have the potential to improve learner performance, and quintile 5 schools that offer supportive environments). Teachers who are appointed in schools that differ from those to which they are accustomed, should be provided with some kind of induction programme (as part of initial teacher education, and when and after they are assigned) to help them to cope with the experience, and potential stress of teaching in a more unfamiliar context.

### **THEME 5: Strengthening the teacher pool**

*The supply of teachers refers to all those who are currently working as teachers as well as those who are potentially available to be employed in the school system. The latter includes the number of graduating student teachers who make themselves available for employment as teachers, foreign teachers who might be interested to teach in South African schools, and teachers who are not currently working at all or who are working in other sectors of the labour market. The study examined the number of graduating student teachers as well other potential sources of teacher supply, such as unemployed people from the education, training and development field.*

### **Finding 8**

The existence of unemployed people qualified within the education field in the Western Cape is evident, and there may even currently be a teacher surplus. For example, in the Western Cape, of the 1 405 new teachers who were appointed to permanent teaching posts between April 2003 and February 2008, only 519 were still in service in 2008, with 886 having left the employment of the WCED (Lewis, 2008). This observation would reflect a finding by Crouch (2005, in Arends, 2007), that the young, less qualified teachers leave the profession sooner than the more qualified and experienced teachers who tend to stay in the teaching profession (in the literature review).

Data from the Student Survey and the report by Yu on the labour market status of the graduates whose study field is education in the Western Cape, also indicate that there may be a significant pool of education student graduates who are not teaching. However, these 'surplus teachers' may not be in the high demand areas where shortages lie, or they might have been trained before the introduction of the revised National Curriculum Statement. Other reasons for such people not being in teaching posts may be poor quality of candidates; poor working conditions; poor student behaviour; perceived low salaries; and the poor image of teaching (Dinham et al, 2008 in the literature review). In the School Survey principals reported that, in their experience, the 'pool' for

employment in temporary substitution posts, of good quality teachers with appropriate experience and necessary expertise, is getting smaller.

**RECOMMENDATION 8: WCED needs to consider how best to identify competent people who may be well-qualified to teach subjects in high demand, who are able to cope with the new curriculum needs (who are not currently teaching), and draw them back into the profession especially to fill temporary posts.**

#### **THEME 5 (contd)**

*WCED needs to be mindful of a situation where ineffectual teachers remain in the teaching force whilst better teachers leave or good quality **education graduates** do not enter it.*

#### **Finding 9**

Data from the School Survey suggest that there may be re-distribution of less effective teachers into less empowered environments. The lower than expected number of teachers in the workforce in their 20s evident from Educator Questionnaire data implies that most new appointees are not young, newly qualified teachers; meaning that in 10 years' time there will be a reduction in the number of experienced teachers in the 30-39 age group, and in 20 years' time a similar situation in the 40-49 age group.

The experience of *graduating education students*, according to Student Survey data, suggests that there may be insufficient opportunities for teachers without experience to enter the WCED teaching force and that alleged teaching shortages are not translating into posts for new entrants.

**RECOMMENDATION 9: There is a need to channel ineffectual teachers out of the system to make way for well-qualified, high calibre new entrants into the workforce.**

- **What requires further investigation is the extent to which teachers who are considered to be seriously incompetent or inefficient are being exchanged between schools rather than replaced by more effective teachers.**
- **What also needs to be established is whether new entrants who specialised in high priority subject areas are applying for posts only at specific schools in particular locations.**

#### **THEME 5 (contd)**

*Increasing the supply of well-trained isiXhosa speaking **Foundation Phase teachers** for the Western Cape is crucial for the DoE's intention to extend Grade R to all primary schools by*

2010, and for it to become part of compulsory schooling. The WCED has allocated 364 additional Foundation Phase teaching posts in high poverty schools in 2008, and there is also a plan to reduce learner/teacher ratios in the Foundation Phase and allocate an additional 150 new Foundation Phase posts in 2009. (WCED, January 2009:3 & 6).

### **Finding 10**

IPET (the initial professional education of teachers) graduate/final year student data for 2006, 2007 and 2008 provided by the four HEIs showed very low counts of isiXhosa and other African home language student graduates for *Foundation Phase* teaching. The low counts are of great concern given the current policy of home language instruction in the early school years. Morrow ascribes the shortage of Foundation Phase teachers to the social perception that teaching in the senior grades carries more status (Morrow, quoted in Macfarlane, 2007 in the literature review).

**RECOMMENDATION 10: There is a need to increase the supply of well-trained Foundation Phase African language mother-tongue teachers, as well as male teachers. Bursaries should target those areas/groups where present education student enrolment is particularly low. Capable learners who are still at school, and graduates from universities who would like to enter the teaching profession should be actively recruited. Strategies should include fully-costed bursaries, such as Funza Lushaka, with bursary obligations to teach for the number of years funded.**

### **Finding 11**

In response to an open-ended question in the School Survey about teacher supply and demand issues and associated challenges, principals emphasised the need to *attract the best people* into the profession and to motivate the current stock of more effective teachers to remain in the profession.

**RECOMMENDATION 11: The image and status of the teaching profession needs to be improved and issues that make the profession unattractive to desirable new entrants should be addressed. Strategies include creating an image of teaching as a meaningful and socially valued profession, improved working conditions and protection of teachers' rights and safety; as well as material rewards and perks. The Occupational Specific Dispensation for Educators (OSD, 2008) lays the basis for interventions in this area.**

## **THEME 5 (contd)**

*There are factors that slow down **appointment processes** in schools. Issues around staff establishments, replacement and appointment timeframes and practices need to be addressed.*

### **Finding 12**

According to School Survey data, some *constraints* are that:

- schools are told too late in the year what their staff establishment will be in order to plan and cater for the coming year
- the WCED vacancy list comes out only twice a year
- the high cost of advertising WCED temporary, part-time and contract positions, has to be carried by the school
- applicants from other regions who apply for posts are unavailable for interviews because they have to cover travel and other costs themselves
- the WCED takes too long to confer permanent appointments, resulting in insecurity of tenure because of lengthy provisional appointments. This leads to loss of the better candidates
- The WCED is: ‘taking months or years to finalise teachers’ early retirement on grounds of health or stress, whilst in meanwhile, the teacher in question is absent’ (quote).

**RECOMMENDATION 12: There is a need for more flexible, accessible and visible electronic information dissemination both for schools that require teachers, and for the available teaching stock. There should be a publicly accessible database of unemployed teachers, and other people trained and willing to teach, (including in temporary posts), giving their qualifications, specialisations and experience. The current system could be made more flexible in terms of dealing with posts that fall vacant between publication of lists of vacant posts through the creation of more easily accessible websites.**

## **THEME 6: Impact of language and demographic shifts**

*There are difficulties arising in some schools around the issue of class size and learner/teacher ratios because there are children with different home languages and a need for **parallel medium classes**. An important factor for the Western Cape is the inflow of isiXhosa families from the Eastern Cape (DoE, 2006 in the literature review).*

### **Finding 13**

Educator Questionnaire data indicate that, in the majority of cases, Foundation Phase classes in the sample are being taught by teachers who speak the language of instruction used as a home

language. However, in Afrikaans/English dual medium Foundation Phase classes teachers more commonly speak Afrikaans than English at home. In the School Survey principals reported that this pattern has implications particularly for children who are mother-tongue isiXhosa attending predominantly Afrikaans medium schools but where English is offered as a medium of instruction.

Principals also indicated that challenges around the issue of learner/teacher ratios are exacerbated by the fact that school principals are counted as part of the teaching establishment when it is impossible for principals to do justice to administrative and management duties and teach.

**RECOMMENDATION 13: The allocation of staff establishments need to take into consideration the issue of classes with children with different home languages and emerging parallel medium classes, particularly in Afrikaans medium schools, to meet the needs of isiXhosa home language learners; and the impact parallel medium classes are having on learner/teacher ratios.**

#### **Finding 14**

In the School Survey principals expressed the need for *remedial or ELSEN* (learners with special education needs) *teachers* and assistant teachers; for example, to accommodate ELSEN learners, and learners with insufficient levels of proficiency in the language of learning and teaching (LOLT). Researchers noted (from the Educator Questionnaires) a trend of appointing teachers in SGB posts to cater for ‘remedial/special needs’ classes.

**RECOMMENDATION 14: Underlying reasons for the demand for ELSEN and remedial teachers evident in public ordinary schools need to be investigated. What should be established is whether the demand exists because learners have genuine learning disorders that are best addressed through specialised remedial teaching; or whether the demand is due to learner under-preparedness as a result of insufficient levels of proficiency in the language of learning and teaching and/or because learners have not had the opportunities to learn what is required in earlier grades. Is the need simply for extra lessons to catch-up, or is there a genuine need for more specialised remedial teachers?**

#### **6.1.2 Recommendations for WCED and Higher Education Institutions**

The recommendation is for closer cooperation, collaboration and co-ordination between WCED and Higher Education Institutions around **SIX** issues:

1. **planning IPET student intake with regard to learning area/subject specialisation, school phase, and home/teaching language**
2. **‘standardisation’ of qualification certificates and identifying a common set of information that should appear on certificates** so that certificates show the specific fields (school level and subject specialisations) in which graduates are qualified
3. **determining the practicality and cost effectiveness of upgrading REQV 13 teachers who are in the 50 plus group**
4. **evaluating the extent to which the costly exercise of up-skilling in-service teachers actually impacts on learner performance**
5. **developing a framework for ongoing professional development in the context of new requirements and Professional Development (PD) points for teachers and guidance in ensuring an appropriate match between the capacity and potential of individual teachers and particular interventions**
6. **focusing professional teacher development on building curriculum subject knowledge in specialisations that teachers already have (for greater depth) and the development of specialisations in cognate areas.**

### **6.1.3 Recommendations for Higher Education Institutions**

The **SIX** recommendations for Higher Education Institutions are to:

1. **urgently investigate reasons for the low count of isiXhosa home language education graduates, especially in the Foundation Phase and increase the supply of well-trained Grade R and Foundation Phase teachers**
2. **investigate reasons for the overall low proportion of African education graduates.** Student Survey data on 2008 IPET final year students suggest that about 14% (90) of the 656 students from the four HEIs classified themselves as ‘African’. The low percentage of African education graduates is an obstacle to Employment Equity and the diversity of the teaching force in the Western Cape.
3. **ensure compatibility of information on students, and consider criteria and ways in which databases on students can be standardised,** to facilitate compiling ongoing comparative data across institutions
4. **establish mechanisms for routine tracking of student teachers once they have graduated, to establish if new student-graduates genuinely experience difficulties in finding teaching posts in the Western Cape.** If real difficulties emerge, HEIs need to identify that reported teacher shortages do not appear to be translating into jobs for their newly qualified teachers.
5. **administer an exit questionnaire to all graduating IPET students every year in future, and share the outcomes amongst themselves and with the WCED.** In future

Student Surveys it would be useful to establish whether students are applying for posts outside of the larger cities in the Province, or outside of Cape Town. It would also be useful to distinguish between whether graduating students who have obtained posts in WCED schools, have been appointed to SGB posts or WCED posts; and, if they intend teaching overseas, if this is a short-term plan and they expect to return, or whether this move is emigration.

6. **identify whether HEIs have the physical capacity and human resources to cope with and cater for anticipated increased enrolments of upgrading REQV 13 teachers, and whether they are in the position to offer the necessary subject specific teacher upgrading qualifications.**

## **6.2 Recommendations regarding systems**

The following recommendations serve as a framework for strengthening systems within:

- WCED (6.2.1)
- Cape Higher Education Consortium, comprising the Cape Peninsula University of Technology, the University of Cape Town, the University of the Western Cape, and the University of Stellenbosch (6.2.2).

### **6.2.1. Recommendations for Western Cape Education Department**

The **THREE** recommendations for the WCED relating to systems are that:

1. **overall communication between WCED operations needs to improve in order to ensure that projects such as this study are linked to, co-ordinated and aligned with other actions and activities in the system.** Our experience of the internal complexities of the education system, interconnections and interdependencies, and pre-existing timelines within the WCED, suggests that external service providers need more general and co-ordinated access to WCED than a single channel.
2. **educator supply and demand projects such as this should be embedded in the overall functioning of human capital management systems and directly linked to the WCED's overall strategy for school improvement and improvement in learner performance.** The objective of improved learner performance cannot be achieved without good quality teachers with appropriate expertise in the classrooms.
3. **the WCED needs to develop and maintain accurate and up-to-date quality electronic information human resource systems and databases.** It is important that WCED captures correct, standardised and comprehensive electronic qualifications data, such as subject and school level specialisations, on all educators when they first enter the system. Later system changes and curriculum changes require both input and keeping track of changes in qualifications/status.

## 6.22 Recommendations for the Cape Higher Education Consortium

A recommendation for the CHEC regarding systems is that:

- *the CHEC Board needs to consider developing the capacity of its member institutions to undertake future large scale education studies and surveys.*

*A concluding recommendation is that the work started by this teacher supply and demand study be continued through follow-up investigations and further research.* For example, investigating what motivates good teachers to remain at the same school, especially higher-poverty schools; the experiences of new entrants into the teaching profession; and researching quality issues such as the relationship between learner performance, and teachers' qualifications and classroom practice.

The literature review in the report provides some of the models used to measure educator supply and demand. However, further research and discussion is required to *identify an appropriate supply and demand model that is realistic and useful in the South African context.* Once a clear national model is identified, provincial education department/s could work towards ensuring that the necessary data sets are readily available; then, using the accepted model as a basis, educator supply and demand can in the future be reliably and systematically modelled at both provincial and national levels. The model should be used in conjunction with policies that make explicit assumptions about interventions and likely outcomes.



## CHAPTER 1: INTRODUCTION

This research was commissioned by the Western Cape Education Department, and was conducted by the Cape Higher Education Consortium, comprising the Cape Peninsula University of Technology, the University of Cape Town, the University of the Western Cape, and the University of Stellenbosch.

The overarching *aim* of the study was to establish the extent to which the Western Cape Education Department is able to meet the current and future teaching needs of all phases and learning areas/subjects of the National Curriculum Statement and the associated language policy issues.

The primary *objective* of this report is to assist the Western Cape Education Department and the four universities in the Western Cape to respond to educator supply and demand needs.

### 1.1 Origin and background to this report

Over a number of years, there has been regular contact between Deans/Heads of Education of the four universities in the Western Cape and the Western Cape Education Department (WCED), under the auspices of the Cape Higher Education Consortium (CHEC). The intention of these meetings is to discuss issues and needs of mutual concern in teacher education. A primary need raised was the lack of reliable data on the demand and supply of educators. In the course of discussions, the Deans/Heads pointed out that there existed capacity within the tertiary sector to conduct this research. They subsequently helped the WCED to revise a draft brief, and agreed to form an oversight committee to direct and monitor the research study.

The Oversight Committee consists of the Deans/Heads of Education of the four universities in the Western Cape, namely Cape Peninsula University of Technology (CPUT), the University of Cape Town (UCT), the University of the Western Cape (UWC), and the University of Stellenbosch (US); representatives from CHEC; and a liaison person from the Western Cape Education Department. The committee was chaired by the Dean from CPUT.<sup>1</sup> A project researcher was appointed to co-ordinate the study, known as the Educator Supply and Demand Audit (ESDA).

The focus of the study was on identifying in which phases, learning areas and subjects, and types of schools, shortages and gaps in educator supply exist. The intention was at the same time to obtain information on educator replacement and recruitment in schools.

---

<sup>1</sup> Oversight Committee meetings for the study took place on: 23 May; 27 June; 1 August; 19 September; 31 October; 9 December 2008, and 6 February 2009.

## 1.2 Aim and purpose of the report

The aim of this report is to provide insight into the current educator supply and demand profile for the Western Cape. The purpose is to support policy and planning in the following areas:

- implications for initial teacher education enrolment at universities
- closing the gap between the demand for educators per phase and learning area/subject and the current supply within the province (redeployment, recruitment, etc.)
- bursary allocations (aggregated according to learning area/subject, first language, race, gender, rural/urban) and financial implications<sup>2</sup>
- the diversification of the profile of the workforce, including race, gender, language.

## 1.3 Scope and rationale

The report attempts to address the following main question:

*Does the Western Cape Education Department currently have sufficient qualified educators appropriately deployed in its public schools?*

The following are sub-questions:

- Does the current profile of educators employed within the WCED meet the requirements of all learning areas/subjects and language requirements of the National Curriculum Statement?
- To what extent is there a match between the qualifications of WCED paid or School Governing Body (SGB) employed educators and their current teaching responsibilities?
- To what extent is there an over-supply or under-supply of qualified educators, per phase and per learning area/subject? Where do gaps currently exist?
- What relationships exist between the qualifications of educators and other characteristics of the school, including the quintile of the school, the pass rate, learner performance, and the home language of the majority of the learners? Are appropriately qualified educators unequally distributed across different types of schools?
- What is the number of vacancies per phase and per learning area/subject? How long does it currently take to fill vacancies?
- What is the educator turnover per phase and per learning area/subject?
- How does current enrolment and graduate output in initial teacher education match the need for educators in particular phases/learning areas/subjects? How many graduates are actually making themselves available for employment as WCED teachers?

---

<sup>2</sup> Pre-1994, the state provided service bursaries for teacher education where graduates had to work back their bursaries until they had fulfilled their bursary obligations. Prior provision of bursaries is no longer the case. Funza Lushaka offers bursaries to education students who achieve good academic results and who are majoring in particular priority areas. The National Student Financial Aid Scheme (NSFAS) provides loans to students.

For the purposes of the study, a working definition for ‘qualified’ is as follows:

*Qualified refers to a teacher<sup>3</sup> who has received formal accreditation<sup>4</sup> for the teaching of a learning area/subject in a particular phase/grade (i.e. specialisation in the learning areas/subjects, and/or phases that they are expected to teach). This formal accreditation needs to be in the form of a recognized degree/diploma course.*

Attendance of non-formal/unaccredited courses/professional development opportunities is not considered part of this definition of ‘qualified’. Nevertheless, some information about such attendance was collected in the study, as professional development is considered particularly important for teachers who trained and qualified before 1994. This was the year of the introduction of Curriculum 2005, subsequently revised and now known as the National Curriculum Statement.

An underlying *goal* of the study is to gauge whether there is a balance between the number and type of qualified teachers entering and leaving the system each year, and whether all posts in public and special schools are filled by appropriately qualified teachers. A criticism of most supply and demand studies conducted in South Africa has been that the real demands of schools and the system are hidden; because the aggregated data used do not capture the extent to which teachers are teaching out of their fields of specialisation and/or at the level/s of schooling for which they were trained. Thus a crucial dimension of this study has been assessing the degree of ‘match’ between teachers’ qualifications and their subject and phase specialisations, and the grades and learning areas/subjects which teachers taught in 2008. A key challenge was gauging the number of teachers teaching learning areas/subjects and/or grades for which they are not qualified, or are under-qualified – given that many teachers in the system have qualifications which did not originally equip them to teach the new curriculum.

#### **1.4 Research approach and phases of the study**

The following were the three phases of the study:

**Phase 1:** Planning and preparation; situational analysis and literature review

---

<sup>3</sup> The terms ‘teacher’ and ‘educator’ are used interchangeably in this report. In general the term ‘teacher’ is used instead of ‘educator’ to distinguish between educators (for example, teacher educators and others involved in education) and teachers who teach in ordinary and special public schools.

<sup>4</sup> Currently ‘adequately qualified’ in terms of the Department of Education’s *Norms and Standards for Educators* (DoE, 2000) is REQV 13 level or a three-year post-school qualification. In terms of registration with the South African Council for Educators (SACE), the professional teachers’ body, the minimum of a post-matric teacher education qualification of three-years (M + 3) or REQV 13, or two year certificate in teacher education for the *pre-primary phase* (M + 2) or REQV 12, or any other qualification, is recognised by the Council for purpose of registration. Although the *Norms and Standards for Educators* (2000) currently provides the qualifications requirements and a qualification framework for teachers, the *National Policy Framework for Teacher Education* (DoE, 2006) states that in future, requirements will be REQV level 14. That is: a) a four-year professional B Ed degree; b) a three-year junior degree + one-year post-graduate diploma, i.e. an Advanced Diploma in Education (PGCE/HDE) NQF level 7 (480 credits).

**Phase 2:** Instrument design, sampling and data collection

**Phase 3:** Data verification, validation, capturing and analysis

**Phase 4:** Report writing.

#### **1.4.1 Phase 1: Planning and preparation; situational analysis and literature review**

At the start of study in *May 2008*, a situational analysis was conducted to:

- ascertain the availability and extent of relevance of WCED and Higher Education Institutions' (HEIs') data in order to determine how much of the existing information might be useful for the purposes of the study
- try to ensure that the research takes place in such a manner that it draws from and builds on current WCED data collection
- try to ensure that the project contributes towards the development of a sustainable annual analysis of educator supply and demand in public schools, including special schools.

A basic workplan was developed to gauge whether the necessary tasks could be carried out within the timeframes set, with due consideration for the total budget and the current availability of WCED data. However, the situational analysis established that existing WCED data were inadequate for the purpose of this study. Also established was that the available WCED on-line access to schools could not be used within the timeframe. Given these constraints, it was decided that a paper-based survey based on a carefully selected sample of schools and teachers would have to be conducted rather than a census of the whole population.<sup>5</sup>

Data on the enrolment and graduation of student teachers from the HEIs were to be drawn from two sources:

1. Information for the years 2006, 2007 and 2008 obtained from the records of the four Western Cape universities on graduating/final year students by gender, age, home language; subject specialisations/teaching method courses, and, if possible, the language/s of instruction they can offer.
2. A *Student Survey 2008* questionnaire designed and distributed to the four HEIs in August to collect data on the intentions of 2008 final year students (i.e. potential new entrants into the profession) once they have completed their studies (a supply dimension).

In *June 2008* Dr Monica Bot was commissioned to prepare a literature review during July 2008. The review was to identify and cover definitions of key concepts and different models of teacher

---

<sup>5</sup> According to WCED data provided in January 2008, there are 1 451 public ordinary schools in the Province – 313 secondary schools, 41 combined schools, 177 intermediate schools, and 920 primary schools. There are approximately 67 public special schools in the Province.

supply and demand; empirical findings from related research; criteria; variables and procedures used to measure supply and demand.

Key indicators and variables for the study were identified from this literature review and through consultation with various experts; these inform the development of the data collection instruments. Professor Tim Dunne (UCT, Department of Statistical Sciences) was commissioned to assist with data analysis.

#### **1.4.2 Phase 2: Instrument design, data collection and sampling**

School and teacher-level data collection instruments were developed in *July 2008*, in consultation with an instrument design team and drawing on WCED experience. The goal was to try to ensure that the school and teacher-level instruments developed would a) be user-friendly; and b) lend themselves to efficient and easy capturing and analysis. It was hoped that the database developed would also contribute to implementation and sustainability within the WCED.

School level data collection instruments developed included:

- an *Educator Questionnaire* (EQ) for all teachers at each of the sample schools to complete
- a *School Survey* for school principals to complete.

Both instruments were piloted in July in preparation for the collection of school data.

A sampling frame was subsequently agreed upon. Essentially data were to be collected on a carefully selected sample of 151 public ordinary and special schools from two Education Districts (one rural and one urban), namely Metro East, and Eden and Central Karoo. Findings could be extrapolated from these two districts but would be indicative rather than representative of the whole population.

Planning for paper-based data collection at the sample schools took place before the end of July 2008. This planning included training more than thirty suitably qualified and experienced fieldworkers (15 located in the Eden and Central Karoo District and 15 located in Cape Town) and the development of a fieldwork management plan in collaboration with the WCED, which included a breakdown of site visits and a specification of which fieldworkers would undertake which visits. Sample schools were all contacted at the beginning of the third school term via email, fax and telephonically to arrange the site visits.

Data collection at the sample schools took place 11-28 *August 2008*. Data collection was carried out in collaboration with the Schools Development Unit (SDU) at UCT:

- All teachers of Grade R-12 classes including teachers in SGB posts at the sample schools were asked to complete the *Educator Questionnaire*. Teachers were asked to bring hard copies of their qualifications/certificates to append to their completed questionnaires for validation purposes.
- All school principals were asked to complete the *School Survey*.

Fieldwork at schools was completed within the data collection timeframe, and with due consideration to the project budget. A team of five people was responsible for quality assurance of the fieldwork. Plans put in place to deal with ‘missing’ data (absent teachers on the day of the data collection) included giving each school a self-addressed envelope (to post outstanding questionnaires and qualifications), follow-up emails, faxes, phone calls and, in some cases, direct collection from schools after the school visit.

In *September 2008*, the School Survey was also sent via the WCED bulk email facility and post to all public ordinary and special schools in the province (i.e. to the whole population). School principals were asked to fax or post the completed surveys to CHEC by 13 September. Questionnaires received were collated and checked for missing pages from the faxed copies. The WCED also posted hard copies of the School Survey to all schools in case they had not received the initial email. A follow-up email with an extended deadline was sent to schools in October reminding schools, if they had not already done so, to return their completed School Survey questionnaires.

A report prepared by Derek Yu on the labour market status of the graduates whose study field is education, training or development in the Western Cape, was received from Professor Servaas Van der Berg, Department of Economics, University of Stellenbosch, and made available for incorporation into this report. The labour market report uses the Labour Force Surveys (LFS) and census data as sources of potentially available people (for teacher supply) by identifying the number of individuals and unemployed people who studied education and/or had previous jobs in education but who are not currently employed in the sector.

#### **1.4.3 Phase 3: Data validation, capturing, verification and analysis**

Management, preparation, cleaning and capturing of the data collected for analysis and manipulation commenced in *October 2008*. Because of the way a number of things had worked out, the original October deadline for the report was extended. For example, there was pressure to verify the data that had been collected through the Educator Questionnaires before the data went for capturing, as this procedure would enhance the quality of the data enormously. The change to

the timeframe meant that a draft report would only be available by the end of the year, with the final report going to the WCED mid-February 2009.

For the validation process, copies of teachers' certificates were scrutinised to verify all information on qualifications and subject specialisations provided by teachers in their questionnaires. More than 80% of the teachers had attached their documents to their Educator Questionnaires. A team of five people also made judgements and commented on the degree of 'match' between each teacher's qualifications, subject and phase specialisations and grades/subjects taught. As soon as each batch of Educator Questionnaires was ready for data capture, the data were captured on an Excel database. Data on a total of 4 545 teachers from 151 schools were captured.

*Student Surveys* and data on Higher Education Institutions' education student graduate output at UCT, US, UWC and CPU were collected and compiled by the end of *November 2008*. Statistical and qualitative analysis of this data for the supply dimension of the report took place at the end of *November* and beginning of *December 2008*. This analysis included provisioning by Professor Tim Dunne of data/information in a form that was accessible, readable and useable for the report writer/s.

#### **1.4.4 Phase 4: Report writing**

This report on the background and findings of the study, together with recommendations, was drafted in *December 2008* to be circulated in *January 2009*. Consultations and discussion of the draft report with key stakeholders took place before the middle of February. In response to comments made by critical readers, the draft report was amended and edited so that the final report could be submitted to the WCED by the end of *February 2009*.

### **1.5 Data collection instruments, sources and samples**

Four main data collection instruments were developed for the study.

School-level instruments included:

- a School Survey
- an Educator Questionnaire
- a data collection report form.

One Higher Education Institution-level instrument was developed:

- a Student Survey.

The following are the sources that were used for the data analysis and synthesis:

- Educator Questionnaire data on 4 545 teachers at 151 sample schools. The EQs were completed by 2 027 teachers from 78 schools in Eden and Central Karoo, and 2 518 teachers from 73 schools in the Metro East. According to the EQs this sample of teachers consisted of:
  - 4 045 WCED paid teachers; 482 SGB paid teachers; four teachers paid by ‘other special funders’; eight who did not know who paid them; and six who did not provide this information
  - 2 425 teachers from 92 Primary/Intermediate schools; 73 teachers from six Combined schools; 2 012 teachers from 52 Secondary schools; and 35 teachers from one Special school.
- School Survey data from 144 of the sampled schools, and data from an additional 497 public, ordinary and special schools that responded to the bulk email and postal survey (i.e. a total of 641, or approximately 42% of the whole population of schools in the Western Cape).
- Student Survey 2008 data on 656 of the final year education students at the four Western Cape Higher Education Institutions responsible for teacher education, UCT, US, UWC and CPUT.
- 2 736 IPET (the initial professional education of teachers) graduate/final year student data for 2006, 2007 and 2008 provided by the four HEIs.<sup>6</sup>
- A report from the Department of Economics, University of Stellenbosch, on the labour market status of the graduates whose study field is education, training or development in the Western Cape (Yu, 2008) that used the LFS and census data as sources of potentially available people for teacher supply.

## 1.6 Structure of the report and outline of chapters

### *Part 1: Research methodology*

- **Chapter One** of the report outlines the scope and methodology of the research.
- **Chapter Two** gives briefly an analysis of the situation and processes undertaken to ascertain the availability and relevance of existing WCED data, and the development of a workplan.
- **Chapter Three** provides the commissioned review of the literature covering key policies, concepts, theories, models, research findings and variables pertinent to a study of the

---

<sup>6</sup> This count includes 88 students from the Northern Institute (NIHE) in the Northern Cape. UWC acts as an accrediting institution for the NIHE and was not able to separate the details of the NIHE students from the details of UWC students.

current ordinary and special public school teacher supply and demand profile in the Western Cape.

- **Chapter Four** describes the instruments designed for the study, the sampling and data collection processes, and the data verification, validation and capturing processes.

## **Part 2: Data analysis and research findings**

- **Chapter Five** describes the challenges in the data analysis and how these were addressed.
- **Chapter Six** provides information gathered from the sample of WCED public schools on the current teaching stock.
- **Chapter Seven** provides findings on teacher retention, attrition, recruitments, replacements, shortages and difficult to fill posts.
- **Chapter Eight** presents the available information on education student graduates. In particular, it reports on the phase and curriculum specialisations and language/s of instruction profiles of the students from the four Western Cape universities graduating with a four-year B Ed or a Post-graduate Certificate in Education (PGCE)<sup>7</sup> in 2006, 2007, and 2008. It also discusses potentially available teaching stock by identifying the number of unemployed people in the education field, and provides information on the labour force participation rate (LFPR) of people from that field.

## **Part 3: Main findings, conclusions and recommendations**

- **Chapter Nine** summarises the main findings of the study uses the ESDA experiences and findings to draw conclusions and make recommendations.

---

<sup>7</sup> The PGCE follows an appropriate first degree (for example, BA/BSc). It is to be replaced by an Advanced Diploma in Education (ADE). Both the four-year B Ed and the PGCE are recognised at REQV 14 level.



## **PART 1: RESEARCH METHODOLOGY**

Key elements of the research design and phases for the study are outlined in Chapter 1. Part 1 provides a more detailed account of the phases of the research and the methodology adopted for the study. Specifically, it:

- provides the literature review
- describes how sampling was done, how the data-collection instruments were developed for the study, and the piloting of these instruments
- outlines data sources and participants in the data collection
- describes processes and procedures followed to collect the data (for example, the process of gaining access to schools and teachers)
- discusses approaches to data-processing.

## **CHAPTER 2: SITUATIONAL ANALYSIS AND WORKPLAN**

The immediate concerns and tasks for the ESDA team were to:

- establish how best to take the project forward and identify possible WCED contact people for assistance with different dimensions of the research and data
- establish what data and data sources already existed on the WCED's Education Management and Information System (EMIS), before following up any other sources, for example, the South African Council for Educators (SACE) – the professional teachers' body that registers teachers who meet qualification requirements – so that there would be no duplication of data collection
- establish the extent to which the ESDA team would have access to data already available, and how to access available WCED databases/sources
- establish what data were not readily available, would be useful and would still have to be collected, and how best to approach this data collection (for example, whether some dimensions ought to be collected at individual teacher level)
- assess the extent to which data had to be directly collected from schools and teachers through fieldwork in compliance with WCED conditions/criteria for research.

Appendix A provides a more detailed account of the investigations and processes undertaken, a summary of which is provided below.

### **2.1 Situational analysis**

Through an analysis of the existing data sources within the WCED, it was established that:

- The WCED Personnel Department has its own system for electronically capturing information on teacher qualifications on PERSAL (Personnel & Salary System); an important purpose of which is to establish salary scales. Although PERSAL is able to provide some information about educators currently on the WCED payroll<sup>8</sup>, information on teacher subject specialisation/s and qualifications is incomplete and not always updated.
- The CEMIS (Central Education Management Information System) is the operational central database in which schools capture, amongst other things, learner registration and transfer activities. CEMIS has captured data on Grade 10-12 learner subject enrolments per school but this data is not verified. Educator data are currently of secondary importance in CEMIS.
- The WCED's EMIS captured data on educators (including teacher qualifications) at public ordinary schools for 2005; this data has not been cleaned or verified.<sup>9</sup>
- The WCED Curriculum Department has a centralised electronic database of primary teachers' participation in in-service education and training (INSET) accredited by the WCED. INSET attendance by high school teachers is recorded manually in registers kept by each district.
- SACE has been tasked with developing a structured Continuing Professional Teacher Development (CPDE) system and is in the process of developing a system for keeping records of educators' Professional Development (PD) points per teacher, but this system is not yet in place.

A detailed examination of the WCED data showed that the current state of the available data on teacher qualifications and, in particular, their subject specialisation/s were inadequate for the purposes of the ESDA research. The major constraints in this regard are detailed in Appendix A.

In the light of the above, it was agreed that the ESDA would require considerable original data collection, particularly on teacher qualifications and subject specialisation.

## **2.2 Workplan**

A provisional workplan for the research was subsequently drawn up at the beginning of May 2008. This workplan was premised on the expectation that an online census would be conducted of the whole teacher population of the Western Cape before the end of June 2008, as part of the planned WCED Human Capital-Leave Management System (HC-LMS). However, after

---

<sup>8</sup> Appendix B provides a list of fields currently available on PERSAL as supplied by PERSAL.

<sup>9</sup> In 2005 a service provider delivered data collection forms to schools which teachers were asked to complete. The provider then captured the information into a database.

protracted discussions with WCED officials (including an engagement with the Senior Management), it was concluded that an online approach would not be possible for the ESDA, particularly within the timeframes of the research.

This difficulty led to a revised workplan using a paper-based approach. This had to be confined to a carefully selected sample, as a paper-based sample of the whole population of teachers in the Western Cape would not have been feasible in terms of the budgetary and time constraints of the ESDA.

Interactions also took place with the national Department of Education (DoE) when it became apparent that the DoE was planning to pilot a survey of educator qualifications and subjects in 2008 with the intention of going to scale in 2009. In order to ensure synergy with the national processes, the ESDA project researcher maintained contact with Tessa Welch at the South African Institute for Distance Education (SAIDE) that had been commissioned to develop the teacher qualification questionnaire by the DoE.

Given the complexity of the data to be collected in the ESDA, it was decided that a paper-based questionnaire would be directly administered to a carefully selected sample by experienced fieldworkers. The sample would be selected so that the findings could be extrapolated for an urban and a rural district. Collection of data on the qualifications of the entire educator population of WCED schools would have to follow (via the HC-LMS) as a subsequent, and ideally ongoing, activity.

Notwithstanding the decision to use the paper-based approach, the ESDA endeavoured to ensure that the outcomes of the data collection process would be such that:

- the ESDA data collection process should not simply ‘reproduce’ existing ‘unusable’ WCED data
- as far as possible the data collected should be aligned with WCED systems, so that the information collected can be integrated with WCED data and kept up to date
- the data collected should, as far as possible, reflect priorities for decision-making regarding provisioning, budgets, and teacher development.

Clearly there was a need for a strong conceptual framework to guide the activities planned and data collection for the Western Cape study. This framework needed to draw on a systematic review and analysis of seminal literature in the field. The literature review was needed to assist in locating the ESDA within models of demand and supply in relation to other models; to position

the study in relation to other identified studies in South Africa; and to identify dimensions and variables for the development of data collection instruments.

The brief provided to the literature reviewer was to identify and cover definitions of key concepts and different models of teacher supply and demand; empirical findings from related South African and international research; and criteria, variables and procedures used to measure supply and demand. In particular, the reviewer was asked to take into account limitations and lessons learnt from related research projects in South Africa. Although the review was to concentrate largely on quantitative studies, it was also to draw on qualitative studies conducted in South Africa. As few local studies have concentrated on the match between teacher qualifications (specifically subject/ learning area/phase specialisation) and teachers' teaching assignments and the language/s of learning and teaching, other literature related to the issue was also be covered. The idea was that the conceptual frameworks and variables used in these studies could then be compared and assessed with a view to their use in this Western Cape study and other future studies.

Chapter 3 provides this literature review.

## CHAPTER 3: LITERATURE REVIEW

This literature review identifies, describes and covers:

- definitions of key concepts in the field of educator supply and demand and dimensions, guidelines and procedures used to assess teacher supply and demand
- different models of measuring supply and demand in the field
- relevant empirical local and international research with similar objectives in South Africa so as to establish key differentiators and similarities between this study and others, as well as constraints, problems and lessons learnt
- themes and variables for consideration for data collection instruments for the ESDA.

In the process of conducting the literature review, the author surveyed archival documents on the issue and leads from seminal texts, and scanned literature from published and unpublished documents and the Internet.

### 3.1 Introduction

It is generally accepted that teachers are key to a good quality education system – one that is capable of producing the human resources needed by the economy. It is therefore of the utmost importance that there is an adequate supply of trained teachers. South Africa faces several problems in this regard. For several years, concern has been expressed not only about insufficient numbers of teachers being trained, but also about the uneven quality of teachers currently in the system. This unevenness is reflected in poor results in national assessments of learner achievement at the end of the different school phases as well as in international comparative studies.

In 2006 the DoE published the *National Policy Framework for Teacher Education and Development in South Africa*, (hereafter referred to as the National Policy Framework) in which it is stated that ‘there is clearly a lack of fit between overall demand and supply, and also between demand and supply for particular skills in particular schools. There is an oversupply in some subject areas, and an undersupply in others,’ notably in the Foundation Phase (FP) and Intermediate Phase (IP) and in Mathematics, Science and Technology, Languages and Arts, and the Economic and Management Sciences. Furthermore there are imbalances in the deployment of teachers, with rural schools particularly badly affected (DoE, 2006).

Not surprisingly, the National Policy Framework concludes that decisive measures are required to increase the number of young people entering and graduating from initial teacher education and

making themselves available for employment as teachers after graduation, and that there is a need to create conditions that will ensure the retention of teachers, especially those with most experience and/or scarce skills.

This literature overview covers some of the seminal literature pertaining to teacher supply and demand, and aims to guide the activities planned and data collection for the Western Cape teacher supply and demand profile. Key concepts in the field of teacher supply and demand are covered in section 3.2, followed by a discussion of different models of measuring supply and demand and relevant empirical research in sections 3.3 and 3.4. Section 3.5 draws out some of the pertinent issues for a Western Cape teacher supply and demand profile.

First, however, a brief overview is given of developments in respect of South Africa's teaching stock.

### **3.1.1 South Africa's teachers: a brief background**

#### **3.1.1.1 Teacher numbers**

The number of teachers in South Africa increased rapidly from the mid-1970s to the mid-1990s, from 143 632 in 1975 to 359 668 in 1996, in line with the rapid expansion of the schooling system. There were considerable differences in learner/teacher (L/T) ratios and teacher quality between schools for the different race groups. In the Western Cape, L/T ratios ranged from 42.1:1 in African primary schools to 17.2:1 in white primary schools, and at secondary level from 40:1 to 14.7:1 respectively (Crouch and Perry, 2003).

In the mid-1990s, the DoE began to implement a programme of ensuring equality of resource inputs in schools, including equalising the provision of teachers. This programme entailed employing more teachers in understaffed schools and a rationalisation and redeployment process in others. By 1998, the number of teachers in areas of undersupply had been increased, but there was still an oversupply in other areas. Crouch and Perry (2003) state that faced with an apparent oversupply of teachers, the DoE reduced the number of colleges of education from over 100 to 50, which was also a precursor to the inclusion of these colleges into Higher Education Institutions. They conclude that these labour market signals appear to have caused a further decrease in teacher training enrolments.

While the total number of teachers decreased by 1.3% between 1996 and 2000, this change was partly counteracted by an increase in the number of teachers employed by School Governing Bodies. Between 1996 and 2000, the number of SGB paid teachers increased from 10 931 to 29 939, or 8% of all teachers employed in public schools (Crouch and Perry, 2003).

In the Western Cape, the number of teachers dropped by 8.6% between 2000 and 2003 to 27 248, while the number of learners increased. Consequently, the learner/teacher ratio went up from 30.7:1 to 35.1:1 over this period. The latter ratio would have been much higher were it not for the increase in the number of teachers paid by SGBs – almost 13% in 2002 (Shindler, 2008), increasing to 14.6% in 2004 (DoE, 2005b). In 2006, there were 32 825 teachers in the Western Cape (including SGB-paid teachers), and the learner/teacher ratio had dropped to 29.8:1 (DoE, 2008).

### **3.1.1.2 Teacher quality**

Rapid growth in teacher numbers between 1975 and 1994 ‘was predicated on an increase in the number of teachers whose qualifications have now become obsolete, and are considered unqualified or underqualified educators’ (Crouch and Perry, 2003). The proportion of un(der)qualified teachers increased from 11% to 36% over this period, dropping thereafter to 22% in 2000 and to just over 8% in 2004.

Teacher quality is a major determinant of learner achievement, more so than class sizes, overall spending levels or teacher salaries (Darling-Hammond, 1999). Indicators of teacher quality include years of teaching experience, teacher preparation programmes and degrees, teacher certification, teacher coursework and teacher’s own test scores (King Rice, 2003). Unfortunately, good measures for teacher quality are often not collected, especially with regard to factors such as verbal ability, pedagogical skills, enthusiasm, etc., all of which are extremely important (Santiago, 2002).

Teacher quality is certainly a matter of concern in South Africa. One problem is that there are few quantitative indicators to measure quality, other than the national assessments at the end of the different school phases. Repetition levels can no longer be used as an indicator, as learners are allowed to repeat only once per phase, although the fact that far too many learners do not make it to Grade 12 is also an indicator of poor quality.

The President’s Education Initiative research project (Taylor and Vinjevold, 1999) concluded that the most critical challenge for teacher education was the limited conceptual and content knowledge of many teachers, which contribute to low levels of learner achievement (DoE, 2006). Part of the problem is the number of teachers who teach subjects in which they have not received training. According to Professor Servaas van der Berg of the University of Stellenbosch, only 50% of Mathematics teachers and 42% of Science teachers have studied these subjects beyond secondary school level (Van der Berg, 2003).

Two teacher development projects that have assessed the extent to which primary teachers have mastered the relevant learner curricula for the grades they are teaching are the Khanyisa programme and the Integrated Education Project (IEP). The former tested Grade 3 teachers using items from tests designed to assess Grade 6 learners, and the average score in Mathematics was 67% and in Language 55%. The IEP, which works in 1 000 schools, found that after four years of an intensive intervention programme no primary teachers achieved 100% on any test, and mean scores in Mathematics were particularly low. Taylor et al (2008) highlighted a number of inefficiencies at school level, including high levels of teacher absenteeism, inappropriate timetabling, a variety of activities which interfere with time spent teaching and ineffective teaching practices.

A recent pilot study on a sample of Grade 6 Mathematics lessons in 40 primary schools in Gauteng found that the type of teacher education institution attended (university, urban or former homeland college of education) mattered most in terms of learner achievement; i.e. the quality of teacher training was probably a key variable (Carnoy et al, 2008). The study found that 96% of teachers were not trained to teach the new Mathematics curriculum, and that the short-term training provided had not been effective (Business Day, 14/7/08).

Similarly, the 2003 TIMSS (Trends In the International Mathematics and Science Study) showed that while South African teachers have extensive development opportunities, the evidence of poor learner performance implies that these have limited impact. The National Policy Framework therefore proposes a new continuing professional training and development system that will ensure that current initiatives devoted to the professional development of teachers contribute more effectively and directly to the improvement of the quality of teaching, etc. (DoE, 2006).

## **3.2 Key concepts and variables in the field of teacher supply and demand**

### **3.2.1 Demand**

The demand for teachers in the schooling system is influenced by a number of factors. According to the National Policy Framework, the main determinants of demand are the number of teachers leaving the system and needing to be replaced, and the number required because of increased or decreased learner enrolment. These factors tend to be relatively stable under normal circumstances, but two exceptional factors are highlighted: the unusual high mortality rate, especially among young female teachers, which varies considerably by province; and the large-scale migration of families from rural areas into urban and metropolitan centres (DoE, 2006). The latter is an important factor for the Western Cape, which experiences an inflow from Eastern Cape rural areas.

There are several policy tools available to educational authorities to manage teacher demand, notably class size (which is the most deeply studied, especially about the effect on achievement), and teaching loads and required learning time for learners (there is little research on the impact of these). Three other measures that are less likely to be used are structure of the curriculum and educational programmes, the ending age of compulsory education, and the academic standards defining graduation requirements (Santiago, 2002).

In schools, variables affecting the need for teachers are the L/T ratio; the number of learning areas and/or subjects in the curriculum offered by the school; the areas of specialisation; and the number of hours per day that teachers teach. Most of these factors are determined by agreement between the education departments and the teachers' unions, and tend to be relatively stable over time (DoE, 2006).

Some these variables are discussed in more detail below, namely policy developments; finance; enrolment trends; learner/teacher ratio; teacher age; and teacher attrition.

### **3.2.1.1 Policy developments**

Some of the more general policies that directly or indirectly shape the demand for teachers include those of improved access, equity, efficiency and redress in education. The period of compulsory education applies to ten years of schooling, or from the age of six to fifteen, when ideally learners should obtain their General Education and Training (GET) certificate at the end of Grade 9. However, many learners stay in school until Grade 12 and write the Senior Certificate examinations, which may enable them to enrol at Higher Education Institutions.

It is the DoE's intention to extend Grade R to all primary schools by 2010, so that it becomes part of the compulsory schooling phase. In 2006, there were 31 836 learners in Grade R in Western Cape public ordinary schools, which represented only 35% of Grade 1 enrolment (DoE, 2008). In other words, if this target is to be achieved there is a need for many more Grade R classes and teachers.

The age-by-grade policy and the requirement that learners can fail only once per phase also influences teacher demand, as it has lowered L/T ratios and improved flow-through, however superficially. (See also enrolment trends below.)

The post-provisioning norms introduced in 2000 relaxed the L/T ratios for schools with more complex curricula offerings. From 2003, provincial education departments were instructed to phase in a process whereby impoverished schools got more teaching posts. The number of

teaching posts for a school would be determined by the ideal class size for a specific subject or phase, the need to promote a subject, school size, the number of grades, the medium of instruction and learners with special needs (EduSource Data News 41).

### **3.2.1.2 Finance**

The provincial education budget determines the number of teaching posts that the system can afford. From the mid-1990s, the DoE started equalising budget allocations to provinces, and key to this equalisation was increasing the number of teachers in understaffed schools and decreasing their number in over-resourced schools. A L/T ratio of 40:1 at primary schools and 35:1 at secondary schools was deemed affordable, and together with redeployment and rationalisation this intervention eventually resulted in a decrease in the total number of teachers between 1996 and 2000. In some provinces, spending on personnel consumed more than 90% of the education budget, and they were instructed to reduce this spending to at most 80%, so that more funds would be available for school infrastructure, learning and teaching support materials, etc.

Salary scales are linked to qualifications, and are determined at national level in negotiation with teacher unions, and influence the financial attractiveness of the teaching profession to potential teachers and student teachers. Arnott and Chabane (1995) point to a ‘paper chase’ as an unfortunate byproduct of the automatic link between higher qualifications and higher salaries, with significant implications for the salary bill.

### **3.2.1.3 Enrolment trends**

One of the major determinants of demand is the size of the school-age population, which should be more or less the same as the number of learners in school, and trends in learner numbers over a period. According to the latest available figures not all children in the Western Cape are in school; in 2006, the gross enrolment rate at primary level was 95% and at secondary level 86% (DoE, 2008).

According to Snap Survey figures, the number of learners in the Western Cape increased from 918 030 in 2001 to 978 517 in 2006, slightly down from a high of 980 065 the year before. The number of teachers increased steadily from 27 211 to 32 825 over this period, and the L/T ratio dropped from 33.7:1 to 29.8:1. Ordinary public schools enrolled 949 539 learners and employed 30 440 teachers, while independent schools enrolled 28 978 learners and 2 385 teachers (DoE 2008).

Also important regarding enrolment is the distribution of learners across the different grades. The table below shows that enrolment is highest in Grades 1-3 and in the first three years of secondary

school (Grades 8-10). After grade 10 there is a sharp drop in enrolment. This means that many learners do not complete secondary schooling, and their chances of employment or gaining access to higher education are vastly reduced. Some go into Further Education and Training (FET) colleges or enter learnerships; but in view of the need for advanced skills this represents a great loss.

**Table 3.1: Enrolment by grade in Western Cape public ordinary schools, 2006**

<b>Grade</b>	<b>Number of learners</b>	<b>% of total</b>
1	91 082	10.0
2	85 124	9.3
3	89 768	9.8
4	80 485	8.8
5	78 112	8.5
6	73 561	8.0
7	65 892	7.2
<b>Subtotal Primary</b>	<b>564 024</b>	<b>61.7</b>
8	82 481	9.0
9	83 566	9.1
10	86 136	9.4
11	58 152	6.4
12	40 459	4.4
<b>Subtotal Secondary</b>	<b>350 794</b>	<b>38.3</b>
<b>Total</b>	<b>914 818</b>	<b>100.0</b>

Source: DoE, 2008

#### **3.2.1.4 Learner/teacher ratio**

In the Western Cape, the average ratio at public schools in 2006 was 29.8:1, ranging from 31.9:1 at primary level to 29.5:1 at secondary level. At combined and intermediate schools, the ratios were 26.8:1 and 34.6:1 respectively (DoE, 2008), all below the maximum. This does not mean, however, that the ratios apply to each and every school, and there may well be schools with ratios well above these averages.

#### **3.2.1.5 Teacher age**

The demand for teachers is also related to their age; an ageing teaching stock means a higher demand for new teachers as many will be retiring. In this regard, the proportion of younger teachers (those aged under 30) declined from just under a quarter of all teachers in 1997 to 8% in 2002 and to 6% in 2005. The proportion of those aged 40 and older increased from 29% in 1997 to 46% in 2002 and 51% in 2005 (Bot, 2003; Arends, 2007). This small percentage of younger teachers is clearly a matter of concern, as the age profile also has fiscal implications; the older the teachers the higher the average salaries, because a higher proportion of teachers is close to or at the top of the scale (Arnott and Chabane, 1995).

### **3.2.1.6 Teacher attrition**

Arnott and Chabane (1995) point out that when there is an economic upswing, there tends to be an outflow of teachers from the schooling system. According to a study commissioned by the Education Labour Relations Council (ELRC), more than 6 000 teachers were leaving the system annually by 2002/03 (EduSource Data News 50). Duncan Hindle, then Deputy Director General of the DoE, said in 2003 that public schools lost 17 500 teachers a year through natural attrition. As three to four years' training cost R60 000 - R80 000 per person, the replacement cost amounted to R1bn to R1,4bn for every 17 500 teachers lost (EduSource Data News 44).

The National Policy Framework notes that the rate of teacher resignations is stable at slightly more than half of all departures, but that the rate of departures through retirement, medical incapacity and mortality is increasing. Natural attrition is between 5% and 6% per annum (DoE, 2006). According to the Mobile Task Team (2005), the main cause of attrition in 2003 (excluding those who left because their service period or contract expired) was resignation, which accounted for 53% of all terminations. Mortality accounted for 17.6% of terminations (up from 4.7% in 1997), and medical reasons for 8.5% (up from 3.8%).

Health issues and unhappiness with working conditions thus are the main causes of attrition. A large-scale study by the ELRC found an HIV prevalence rate of 12.7% among South African teachers (Peltzer et al, 2005, in Paterson and Arends, 2008). A sample of third- and fourth-year teacher training students at 25 HEIs found an HIV prevalence rate of 8.2%, ranging from 13.2% among African students to less than 1% among students from other population groups (Shisana et al, 2005, in Paterson and Arends, 2008). The authors of both reports conclude that low socioeconomic status is related to HIV, with especially young African women most at risk.

In respect of working conditions, a survey conducted by the HSRC and the Medical Research Council found that more than half of teachers considered leaving the profession because of inadequate remuneration, increased workload, poor relationships with the education department, lack of professional recognition, dissatisfaction with work policies and job insecurity (Hall et al, 2005, Shindler, 2008).

In the Western Cape, of the 1 405 new teachers who were appointed to permanent teaching posts between April 2003 and February 2008, only 519 were still in service in 2008, with 886 having left the employment of the WCED (Lewis, 2008). This observation would reflect a finding by Crouch (2005, in Arends, 2007), that the young, less qualified teachers leave the profession sooner than the more qualified and experienced teachers who tend to stay in the teaching profession.

### **3.2.2 Supply**

The supply of teachers refers to all those who are currently working as teachers as well as those who are potentially available to be employed in the school system. The latter includes the number of graduating student teachers who make themselves available for employment as teachers, foreign teachers who might be interested to teach in South African schools, as well as teachers who are not currently working at all or who are working in other sectors of the labour market. According to the DoE (2006), the latter pool has diminished in recent years. Another study has noted that limited supply appears likely from migration, especially given the strong demand for teachers by other English-speaking countries (Peltzer and Shisana, 2008). In this regard, more than 4 700 South African teachers left to work in the United Kingdom in 2001 and 2002, but a local recruitment agency said 80% of them come back within two to five years (EduSource Data News 44). This pattern would indicate that teacher retention and new graduates are the two most important sources of supply currently.

A survey among 776 final-year student teachers from eleven HEIs conducted in October 2004 found that 27.4% planned to teach abroad in 2005, with the vast majority indicating that they planned to return to South Africa within two years. Only 7.2% were not planning to teach at all, while 63.3% planned to teach in South Africa. Of the latter, only 33% had already secured a job for 2005, three-quarters of these posts were SGB posts in former model C schools. The authors conclude that teacher shortages are not translating into available jobs for newly qualified teachers, and that white teachers were more likely to get posts in well-resourced schools and more likely to go abroad (Bertram et al, 2006).

According to Paterson and Arends (2008), ‘teacher supply is influenced by broader education and curriculum policy, policy on teacher education, and the social and economic environments in which young people find themselves as they make study and career decisions’.

Other supply dimensions discussed below are labour market issues and teacher training.

#### **3.2.2.1 Labour market issues**

Crouch and Perry (2003) state that two key factors affecting educator supply are the broader labour market and the position of educators in relation to other employees. They note that educators are far more educated than other employed workers, that they are more unionised, work fewer hours per week and earn a much higher income than other employed people even considering relative educational levels. The pay advantage tends to disproportionately favour the young and less-educated educators however, and declines with age and qualification.

In 2001, 119 421 trained teachers were working but not as teachers; 90 116 trained teachers were not working at all and their last occupation had not teaching; and 81 660 trained teachers were not working and their last occupation was teaching (Crouch and Perry, 2003). (The DoE (2006) notes that this pool has diminished in recent years, but it might be useful to obtain more recent figures, as especially the first group (teachers working in other areas) might be interested in returning to the profession.) As Crouch and Perry state: ‘The reality is that teachers are well paid compared with other professions requiring equal training, particularly those at the younger and less-educated ends of the profession.’

Arnott and Chabane (1995) also mention that a substantial number of new appointments are not newly qualified teachers; in 1994, an estimated 43% of new teachers employed in the Western Cape were newly qualified. This pattern was also found to be the case in the two other provinces for which these data were available, notably Gauteng and the Northern Cape. In other words, there was (and possibly still is) a tendency to employ more experienced (and hence more expensive) teachers rather than newly qualified inexperienced teachers.

### **3.2.2.2 Teacher training**

In respect of teacher education, the National Policy Framework highlights the Education Ministry’s qualification requirements for teaching and the SACE criteria for registration as a teacher. At present, student teachers are trained either through a four-year B Ed degree or a PGCE for graduates with an appropriate first degree. The National Policy Framework mentions as an alternative a three-year teaching diploma after which teachers can start teaching while completing a fourth year. However, to date this alternative has not been taken up.

The drop in the number of education students in training has led to increased concern about looming teacher shortages. Between 1994 and 2000, the number of student teachers in pre-service training dropped by 85% to 8 850. While their number increased to 11 781 in 2001, this figure still compared poorly to the 100 000 student teachers in training in 1990. Fewer than 5 000 new teachers entered the job market in 2001, according to UWC’s Dean of Education Dirk Meerkotter (EduSource Data News 41). At the end of 2006, 6 000 new teachers were expected to graduate (DoE, 2006).

Based on Higher Education Management Information System (HEMIS) data, Paterson and Arends (2008) found that enrolment in teacher education faculties in HEIs increased from 70 587 to 112 068 between 1995 and 2004, a 59% increase. However, these figures include students doing their initial training as well as those in continuing professional development. The number of teacher education graduates increased from 17 823 to 28 756 over this period, or by 61%. By

2004, 82% of graduates were African and 71% were female. However, Paterson and Arends note a sharp decline in young (25 and under) African female enrolment between 2000 and 2004 in teacher education at universities, and African male participation of this age group also declined. The total African contribution to enrolment in the 25 and under age group stood at just under 30%, while white enrolment was almost 60%. In the 26-30 year age group, the same trend was noticeable. The researchers suggest that some young African women who would in the past have enrolled for a teaching qualification no longer perceive this choice as attractive; where they have the financial means they will enrol for career training in other professions; and that those from poor households are not able to access higher education for social, health, financial or other factors in their household environment.

Paterson and Arends also mention that it is difficult to extract data about IPET (initial professional education of teachers) enrolment and graduation rates, but the report of the Ministerial Committee on Teacher Education (DoE, 2005a) mentions that according to data obtained from Deans of Education, enrolment in IPET was 21 748 in 2005 and expected graduations were 5 322, excluding data from five HEIs. More than 80% of these graduates were from ten HEIs, implying that quite a number of HEIs engage in IPET on a low-key basis. Paterson and Arends estimate that IPET enrolment represented 20% to 25% of total education enrolment in 2005-2006, and conclude that there was hardly any overflow of enrolment from the colleges into higher education after the former institutions were closed. Furthermore, the colleges were the base from which young African women entered the teaching profession as primary teachers. As an estimated 35% to 45% of students were accommodated in residences, this suggests that the colleges served an important institutional role in making teacher training accessible to young rural students (Paterson and Arends, 2008).

Paterson and Arends conclude that there are four interlinked trends:

- a decline in numbers of young African women enrolling for IPET programmes
- a decline in numbers of students applying for NSFAS (National Student Financial Aid Scheme) bursaries to enter primary teacher training
- low numbers of students with mother tongue competence in African official languages enrolling for training in the Foundation Phase (Grades R-3)
- higher HIV prevalence among African female students of low perceived socioeconomic status who are registered for teacher education.

They question whether the social class base of student teachers had changed since 1994, and pose the question: What labour market characteristics or signals inform the decisions of young women to enter, or not to enter, teacher training?

Other reasons for declining numbers in teacher training could relate to the lack of bursaries offered for a number of years, and the amalgamation of the remaining 27 colleges of education into universities by 2001, which led to higher entrance requirements and higher fees, while distance poses an additional obstacle for potential rural trainees. The DoE (2006) also cites the poor public image of the profession and its status, particularly among young people; uncertainty about where they would be placed after qualifying; a competitive employment market; challenging working conditions; and changes with respect to the award of service-linked bursaries to student teachers.

Crouch has said that in order to meet demand, about 15% of 'matriculants' should go into teaching, but only about 2%-3% did so (EduSource Data News 41). Not surprisingly, the DoE launched a campaign to recruit trainee teachers in 2004, especially in English, Mathematics and Science. There were at the time only about 9 000 teaching graduates a year, 11 000 short of the number needed (EduSource Data News 50).

In respect of bursaries, Paterson and Arends (2008) found that the teacher training share of all NSFAS funding dropped from a high of 11% in 1996 to a low of 3.3% in 2001. Between 2003 and 2005, the DoE therefore allocated R60m a year ring-fenced NSFAS funding for teacher education (Kruss 2007, in Paterson and Arends, 2008).

The number of teacher training students receiving NSFAS funding dropped from 8 509 in 1996 to 2 535 in 2001, increasing to 5 216 in 2004 (which represents just under 5% of all education students). Also of interest is that by 2004, NSFAS was largely funding secondary education students at a ratio of 9:1 (Paterson and Arends, 2008).

According to figures provided by Professor Wally Morrow, the introduction of full-cost bursaries for high achieving student teachers in particular priority areas, saw a doubling in the number of first-year IPET students, from 5 173 in 2006 to 10 806 in 2007. However, only 5% of all IPET students were training to become African-language Foundation Phase teachers, which Morrow ascribes to the social perception that teaching in the senior grades carries more status (Morrow, quoted in Macfarlane, 2007).

Much of the above applies to the Western Cape. In 2003, Cape Technikon's Dean of Education said that the province no longer had the capacity to train the 1 800 teachers needed by 2006, and then Premier, Marthinus van Schalkwyk, said that the Western Cape needed 50% more teachers (14 324) in order to meet the needs of its children. In 2003, 1 900 student teachers should have been enrolled in order to meet needs in 2006, but there were only 916 enrolled. Concern was expressed about the low number of African, particularly isiXhosa-speaking, students for primary school in teacher training (EduSource Data News 44).

In 2007, the Western Cape's four HEIs enrolled 3 691 undergraduate teachers, fewer than a quarter of whom were graduating four-year students, not enough to replace teachers lost annually through natural attrition (about 1 500 a year) and excluding the impact of HIV/AIDS. In response, the WCED increased the number of bursaries from 82 in 2005 to 97 in 2007, mostly for Mathematics and Science, while 547 student teachers in the Western Cape received Funza Lushaka bursaries in 2007. Excluding 42 students for whom the information was not available, well over a quarter of these bursaries were for FET phase students (160), followed by Senior Phase (137), Foundation Phase (114) Intermediate Phase (93) students. The provision of these bursaries probably accounted for the doubling in first-year student enrolment between 2006 and 2007 (Morrow, 2007 in Lewis, 2008). The Funza Lushaka bursary scheme prioritises applicants who aim to teach in the Foundation Phase those training to teach indigenous languages and other scarce skills areas such as Mathematics, Science and Technology (Macfarlane, 2007).

In sum, increased demand for teachers in the Western Cape has resulted from increased learner enrolment (which, however, may be levelling off) and increased attrition, mainly due to health-related factors and unhappiness with working conditions. The Western Cape has an acceptable average learner/teacher ratio, but the workforce is ageing. After several years of a poor supply of newly trained teachers, the increase in the number of bursaries provided for student teachers has resulted in increased enrolment in IPET, but this will take a few years to filter through as increased graduate production.

Retention of the current workforce and increased production of IPET graduates are thus the two main sources in terms of supply, and policies should focus on improving working conditions and the health status of working teachers, building staffing and physical capacity in universities to increase enrolments in teacher education, and on the provision of bursaries to increase graduate output. In respect of the latter, bursaries will need to be provided specifically for FP student teachers and African language-speakers, as at present enrolment in these two areas is particularly low. With regard to poor teacher morale, some of the most often cited reasons include

administrative overload and poor working conditions. These causes need to be investigated and addressed, if attrition is to be reduced and new recruits retained in the system.

### **3.3 Models**

The models used to measure supply and demand are similar in that they take the present situation, take account of trends over a number of years, and make projections based on this scenario. Where they differ is in the type of data used and the resulting complexity of the projections. The models investigated are all at a system level (i.e. national and/or provincial) and not school or classroom level.

Arnott and Chabane (1995) make a distinction between scenario modelling and change scenarios. *Scenario modelling* revolves around taking the system as it is and developing alternative possible futures from that base. They caution that perceptions of the system ‘as it is’ differ. A scenario planner can offer different views on changes to the system but it is the end-user who decides which is the most appropriate. Also, as projected figures are approximations of the degree of change, they can be used to support policy decisions at the macro-level but they are not accurate enough for micro-planning. Moreover, the model does not take budgetary constraints into account, and therefore results of the modelling exercise will differ from provincial projections that are based solely on budgetary considerations.

*Change scenarios* are hypothetical pictures of the system based on current enrolment, growth rates in the school-aged population, L/T ratios, learner survival rates, and teacher qualification profiles. Different scenarios can be provided by using different policy options, for example on L/T ratios, and teacher demand can be calculated if certain targets in this regard are to be met. Taking account of attrition one can calculate the projected need for new appointments. Together with projections of the output of new teachers, a demand/supply scenario comparison can be made.

Crouch and Perry (2003) employ a modelling exercise which combines a projection of the demand for teachers, based on learner enrolment and loss of teachers from the system, with a projection of the supply of teachers from training institutions. They model three scenarios, which show the gap between demand and supply of teachers under a range of policy options.

In his report for the OECD (Organisation for Economic Co-operation and Development), Santiago (2002) defines demand as the total number of teaching positions open at any given time, adding that one needs detail about subject matter, grade level, region of the country, special needs (e.g. ELSEN (learners with special education needs), language issues, etc) and teacher attributes

(qualifications, experience, etc). He gives the following formula for calculating average teacher demand:

$$\text{No. of teachers} = \frac{\text{Student population}^*}{\text{Average class size}} \times \frac{\text{Average no. of required learning hours}}{\text{Teachers' teaching load}}$$

\* This putative count is determined by the age structure of the school-age population, enrolment rates and retention rates, the ending age of compulsory education, and the preference between public and private schooling.

### **3.4 Relevant empirical research**

#### **3.4.1 South African studies**

Several studies have been done in South Africa dealing with the supply and demand of teachers.

The methodology and findings of three are briefly presented:

- Educator Supply and Demand in South African Public Schools Education (Peltzer et al, ELRC and HSRC, 2003)
- Educators (Crouch and Perry, 2003)
- Teacher Demand, Supply, Utilisation and Costs (Arnott and Chabane, 1995).

##### **3.4.1.1 Educator supply and demand in South African public schools**

The study 'Educator Supply and Demand in South African Public Schools Education' was commissioned by the ELRC in November 2003 and conducted by the HSRC. The study set out to explore teacher attrition and to understand various reasons why teachers may be leaving the profession, as well as teacher demand and supply.

The study used learner enrolment trends and L/T ratio to determine the demand for teacher growth. Comparing learner population and enrolment, it found that while the potential learner population (ages six-eighteen) increased from 1999 to 2003, learner enrolment decreased from 1997 to 2003. Possible reasons are different entry points at Grade 1, increased learner throughput, fertility decline, an increase in the number of vulnerable children (orphans, girls) with restricted access to school and enhanced provincial education management information systems.

In respect of the school-age population, those aged six-thirteen, grew by 1.4% per annum between 1999 and 2001 and by 1.2% per annum between 2001 and 2003. Those aged fourteen-eighteen grew by 0.6% a year during 1999 to 2001 and by 1.2% during the period 2001-2003, taking estimates of the impact of AIDS into consideration.

The L/T ratio remained stable between 1999 and 2003 at 35.1:1 for both primary and secondary schools.

In order to calculate teacher replacement demand, the study examined trends in the employment of teachers and attrition. In respect of employment trends, according to PERSAL information the total number of public teachers declined from 386 735 in 1997/98 to 366 320 in 2002/03: a net change of -5.3%. The national gross attrition rate in 1997/98 was 9.3%, dropping to 6.4% the following year and declining to 5.5% in 2000/01 before rising again to 5.9% in 2002/03. Major reasons include resignations, death and age retirement.

In respect of supply, a decline in the number of IPET students is noted. According to the Deans' Forum in 2004, education institutions were producing at best approximately 9 000 graduates of whom at least about a third may already be practising teachers. The decline is significant among African trainees. The authors suggest that improved alternative career opportunities have contributed to this decline.

Of third- and fourth-year education students, 8.2% were found to be HIV-positive.

In respect of the pool of potential teachers, labour force surveys show that the number of those unemployed who have education qualifications has declined significantly, and therefore the employment of teachers depends more on the availability of newly qualified teachers. A DoE survey showed a figure of 11 000 unemployed teachers, of which a significant number were trained before the introduction of the revised National Curriculum Statement. These teachers would therefore have to attend training courses to acquaint them with the new curriculum. The study also found that since 1999, more teachers have left the country than are entering, and the net loss of teachers increased to almost 2 000 in 2003.

If the L/T ratio remains constant, the estimated growth demand will remain similar over time for the period 2004-2008. A net enrolment ratio of 97% would require about 319 704 to 336 159 teachers in 2008.

Replacement demand is expected to be significantly up by 2008. If past and projected trends have continued, and the projected demand for teachers is taken into account, there would be a shortfall of around 15 090 teachers by 2008, for L/T ratios of 40:1 for primary and 35:1 for secondary schools. The demand would obviously increase if lower L/T ratios are used.

The analysis suggests that it may not be possible to meet recruitment needs for new teachers from new graduates or from the steadily declining 'pool' of those who have teaching qualifications but are not teaching.

Recommendations are that the DoE, with the support of unions and the Council of HEIs:

- produce more teachers; significantly improved employment opportunities for education graduates and make this clear to prospective student teachers
- intensify programmes to attract more students to education and retain teachers in the teaching profession
- establish a separate tracking system for new education graduates and make available a list of vacancies in the different specialisations in schools
- place more emphasis on the induction of new teachers into the profession and possibly introduce community service for newly qualifying teachers
- ensure that effective support structures are established for teachers so that they can then focus on teaching
- improve the classroom environment and job satisfaction
- improve health of (student) teachers by developing HIV prevention programmes and providing comprehensive prevention and treatment programme for all illnesses
- encourage teaching in rural areas
- create a dynamic data tracking system and conduct a periodic review on the demand and supply of teachers (Peltzer et al, undated media release).

#### **3.4.1.2 Educators**

In their paper 'Educators', Dr Luis Crouch and Helen Perry (2003) investigate the issues affecting the supply of teachers and offer forecasts of teacher demand and supply, constructed from a model.

With regard to supply, they investigate trends in teacher employment; the profile of teacher qualifications; the output of trained teachers from tertiary institutions; demographic dynamics of the teacher workforce in relation to the broader workforce; the attrition of teachers from the state sector; the income distribution of teachers and non-teachers; and the stock of trained teachers not currently employed as teachers. They point out that this paper is not an exhaustive investigation into the dynamics of teacher supply but rather serves as an overview of analyses currently available on various data sources. These analyses include HEMIS, PERSAL, EMIS, the October Household Survey and Labour Force Surveys (LFS). An in-depth sociological and economic analysis of teacher identity, occupational choice, and the dynamics of the teacher labour market in South Africa have not been undertaken.

The section dealing with forecasting supply and demand takes into account projected learner enrolment, workload and L/T ratios, as well as the estimated output from tertiary training facilities

and the possible impact of HIV/AIDS mortality on teacher and learner numbers. Three scenarios are constructed to give an idea of the scope of the problem, under different assumptions.

Teacher demand is based on a number of assumptions about the learner population, enrolment by grade, repetition and net flow rates, the desired class size at primary and secondary level, the period load of teachers, the rate of substitute-teacher usage, the number of orphans and the use of a special L/T ratio for orphans, the attrition rate among teachers and mortality assumptions based on AIDS-related illnesses. They caution that a major factor in projected demand for teachers is the set of assumptions driving the prevalence and death rate of teachers from HIV/AIDS, as well as the birth rate and the number of children of school-going age who are orphans. If the system is under heavy attack from the HIV/AIDS epidemic, the desired L/T ratio may not even be affordable, but these factors require that policy choices must to be made.

Assumptions driving teacher supply include the percentage of Grade 12 learners who sit the Senior Certificate examinations, the pass rate, the ratio of headcount enrolment in HEIs to Senior Certificate passes, the graduation rate of teachers from HEIs, the percentage of education students who are already teachers, and the percentage of graduates who pursue teaching on exit from HEIs. While some of these statistics are key drivers of supply, accurate data are difficult to obtain.

On the basis of the range of values these assumptions may take, they present a set of scenarios for future teacher supply and demand.

The authors conclude that forecasts of teacher demand and supply suggest a looming imbalance, due in part to the HIV/AIDS epidemic, but also due to an overly hasty administrative planning process to control teacher training capacity and an uncontrolled and relatively short-sighted reaction on the part of young people potentially interested in becoming teachers. They conclude that this forecast scenario seems to require mostly large-scale administrative, bureaucratic, information or planning responses.

#### **3.4.1.3 Teacher demand, supply, utilisation and costs**

The focus of teacher utilisation in the report by Arnott and Chabane (1995) is particularly on teacher qualifications, in order to establish where on the teacher qualification scale teachers are located and used, in terms of some key dimensions that inform policy. Race, and to a lesser extent gender, underpin the analysis. They focus on teacher utilisation, provide a profile of teachers, their location, qualifications, rank, age, gender and teaching experience.

Their model is based on the following dimensions: teachers by qualifications profile, by rank, gender, age and years of experience; by phase; the number of learners and its growth rate; the L/T ratio; and the teacher/principal ratio. They examine the factors affecting the movement of teaching stock, notably L/T ratios, enrolment growth, teacher attrition and upgrading. On the basis of these factors they used computer spreadsheet models to project the need for new teachers over the following ten years, with 1994 as the base year. Using information on teacher training providers, the model calculates projected supply of new entrants to the system. Two scenarios are provided which differ in the L/T ratios used.

In respect of costs, the financial implications of teacher upgrading are examined as well as the estimated costs of new appointments for three provinces for which complete recurrent cost data were available.

The data sources used included annual school surveys, PERSAL, SANEX and data from the National Teacher Education Audit. The authors note that the key problems were incomplete coverage in the data and incorrectly coded electronic data, and that a proper data verification process would probably require sampling teachers in each province. In this regard, they identified a need for improved and coordinated data collection processes, for better articulation and synchronisation of complementary information used by the various government departments. Another problem area is that while the education and teacher data can be analysed at provincial level, this analysis is not possible for the post-secondary data that feed into the teacher supply model. Students can study and on graduation find employment in the province of their choice.

The models used are computer spreadsheet-based mathematical models of the education system intended for evaluating the fiscal implications of policy choices at a macro-level. They allow one to explore the consequences of different options, taking into consideration population-driven enrolment growth, teacher supply and upgrade issues, and finance, etc. Analysis is articulated between models of the basic education sector; the post-secondary sector; teacher supply, utilisation and demand; and finance. Thus outputs in some models serve as inputs in others and changes in one model (reflecting policy choices made by users) will impact on the output and policy implications of the other models, so that policy options can be evaluated holistically.

Analyses are done of rank in conjunction with qualifications as well as gender, to inform an understanding of the professional training and quality of managerial and administrative staff at the school level and the possible extent of discrimination in a women-dominated profession.

They also analyse teachers' qualifications and experience in the core subjects of Mathematics and the Science, and the costs of ensuring all teachers are qualified. They point out that there are critical tensions that characterise the relationship between salaries and teacher supply, utilisation and development that have to be addressed. One of these tensions is 'that in a system where qualifications entitle personnel to given salaries, teacher development and upgrading will always be regulated by budget constraints'; the second is 'the tension between productivity/quality and compensation/equity', and the third is 'the issue of training versus attrition.... The high turnover of teachers with less than two years' teaching experience indicates that teacher training is being used as a stepping stone to other professions.'

### **3.4.2 International studies**

The section provides the methodology and findings of two international studies:

- Teacher Demand and Supply: Improving teaching quality and addressing teacher shortages (Santiago, 2002)
- Investing in Teacher Quality: Doing what matters most (Dinham et al, 2008).

#### **3.4.2.1 Teacher demand and supply: improving teaching quality and addressing teacher shortages**

This OECD Education Working Paper by Santiago (2002) mentions a number of short- and long-term strategies that can be employed when demand exceeds supply. In the short term, these strategies include relaxing qualification requirements when employing and/or raising teaching loads, either by increasing class sizes or the number of classes assigned to teachers. In both instances, quality is likely to suffer. Long term strategies intended to increase supply include raising salaries, providing merit-based incentives, and improving working conditions, status of the profession and the career ladder.

There is no clear measure of what actually constitutes a shortage of teachers; a quantitative shortage occurs only when courses or classes are cancelled because there is no teacher to teach it.

Two possible measures are:

- Vacancy rates, although these rates are not very reliable as few vacancies cannot be filled in some way. A better measure is 'difficult to fill' vacancies – those unfilled for a significant time period, or a percentage of positions filled by teachers with 'emergency certification'.
- Hidden shortages, i.e. when a person teaching is not qualified to teach that subject, also called 'out-of-field teaching'.

Shortages tend to be more intense in particular subjects (Mathematics and Science), in teaching fields such as special education, and in rural areas. The working paper contains tables on the percentage of schools with teaching vacancies, by subject; the percentage of schools that found it difficult to fill the vacancies and the percentage using various methods to cover their vacancies. Other tables give the percentage of secondary school teachers teaching subjects without a major or minor in that subject.

One finding is that career decisions of potential teachers, teachers, and former teachers are influenced by incentives: ‘Salaries and opportunity costs strongly influence who goes into teaching, who stays in teaching, and who returns to teaching after a career interruption. Other factors, such as opportunities in the teaching career, working conditions, teacher training and certification procedures, and the status of the profession also play a very relevant role in the supply decisions of potential teachers.’ Organisational conditions in schools also had an impact on teacher turnover; and performance-based accountability systems might be a valid option for improving educational outcomes.

Santiago lists the following measures to examine the supply of teachers: retention rates for present teacher stock; flow of newly certified teachers from colleges/higher education institutions; flow of returning teachers and graduates of teacher programmes who have been absent from the teacher labour market; the flow of people into the profession who do not hold a regular licence; and the flow of private school teachers into the public system. (See Appendix C for chart showing conceptual framework.)

In OECD countries, areas best covered in terms of available data are the demographic profile of teachers, demand-side elements (e.g. student enrolment, composition of the school-age population, instructional time required for learners, teachers’ teaching loads, enrolment rates) and compensation of teachers. Data gaps include flows in and out of the profession, with no information about attrition/retention rates, characteristics of leavers, reasons for leaving/entering/re-entering the profession, reasons for dissatisfaction, potential supply of new graduates, potential supply of returnees, or percentage of newly certified teachers that enter the profession; nor do data seem to exist on the outcomes of teacher recruitment processes. Other information that is not readily available includes the licence status of teachers and the percentage of teachers without qualifications in their teaching field, information on teacher training, teacher certification, existence of market mechanisms, teacher recruitment practices, organisational structure of schools, professional development activities, teaching and learning practices, standards and assessment practices, and partnerships.

### **3.4.2.2 Investing in teacher quality: doing what matters most**

The paper by Dinham et al (2008), 'Investing in Teacher Quality', examines supply and demand for teachers in Australia, which is also experiencing a decline in the attractiveness of teaching as a career and facing projected teacher shortages, which 'increases the pressure for entry standards to fall ... Although there is strong agreement that teacher quality is fundamental, it is currently difficult to find evidence of coherent, concerted, coordinated policy efforts ... focused on teacher quality. Accountability for ensuring quality teachers and school leaders is unclear and diffused.'

There are three broad concerns with respect to workforce planning and Australia's teachers that tend to work against each other:

- providing sufficient quantity of teachers to meet current and emergent needs
- ensuring the quality of new and practising teachers
- matching teacher vacancies with teachers seeking employment.

The Australian teaching force as elsewhere is ageing, and large numbers are expected to retire in the next five to ten years. The feminisation of the teaching workforce is another global phenomenon, and with it the concern that women tend to be less geographically mobile than men. There are particular concerns about attracting and retaining teachers in Mathematics, Science, Information Communication Technology (ICT) and in languages other than English. As a result, there is an increased incidence of 'out-of-field' teaching, especially outside the larger cities, which creates a quality and equity issue for teachers and students 'in the bush'. In respect of attrition and supply of teachers, they note that anywhere from 19% to 28% of teachers resign within the first five years of teaching, while another 10% to 15% of graduating teachers do not enter teaching. As a result, there is a large pool of teachers who are not teaching, who could be induced to return in the future with suitable training and support. Anecdotal evidence suggests a number of reasons for trained teachers not being in teaching: poor quality of some entrants to teaching; inadequate training; lack of support; poor working conditions; poor student behaviour; low salary; better opportunities elsewhere; poor status of teaching.

The next section summarises the main aspects from the various models that need to be addressed in a study such as the Western Cape study.

## **3.5 Variables and dimensions for the Western Cape study**

### **3.5.1 Demand**

In terms of demand, data on variables related to enrolment trends, ideally over several years, need to be obtained:

- school age population by age
- enrolment by grade/phase
- home language
- throughput rates
- gross and net enrolment rates.

On the basis of this information, projections can be made taking account of the impact of migration from rural areas and HIV/AIDS on enrolment, as well as the introduction of Grade R by 2010.

Teacher information over several years:

- attrition through natural causes, HIV/AIDS and others
- attrition by rank, age, subject, years of experience, qualification level
- vacancies and difficult to fill posts by learning area/subject and location
- present demand by phase, learning area/subject, language medium, learners with special needs
- learner/teacher ratios
- age of teachers
- teacher workload
- 'out-of-field' teaching.

On the basis of these trends, projections can be made regarding the number of teachers needed, by learning area/subject, phase and location taking account of the impact of HIV/AIDS and labour market issues.

### **3.5.2 Supply**

Information regarding the supply of teachers can be broken down by quantitative and qualitative information.

Quantitative information over several years needs to be obtained for the current teaching stock in schools:

- number of teachers teaching in the Western Cape by REQV (Relative Education Qualification Value) level, age, grade/phase, rank, gender and years of experience
- present supply by learning area/subject
- new appointments as opposed to experienced teachers dropping back into the system
- retention

- number and proportion of teachers who are in permanent as opposed to temporary posts
- number and percentage of SGB as opposed to state posts
- learner/teacher ratios
- number and percentage of teachers teaching subjects in which they have a major or minor qualification as opposed to ‘out-of-field’ teaching
- home language and teaching language
- HIV/AIDS prevalence.

Potential teaching stock:

- number of teachers currently not working as teachers
- number of teachers not working at all
- number of foreign teachers presently teaching in the Western Cape.

Teacher training information:

- number of ‘matriculants’ and number and percentage of those who go into teacher training
- number of student teachers by year of training, phase and major/minor subject field
- number of student teachers enrolled for initial training as opposed to upgrading
- graduation rates
- number and percentage of graduates who go into teaching
- bursaries available for teacher training
- socio-economic variables (teacher salaries relative to other professions; economic growth vs. recession).

Qualitative information could include:

- teacher qualifications by age, phase, subject and years of experience
- results of Grades 3 and 6 assessments and Grade 9 and 12 examination results
- average age of learners in highest grade; repetition and dropout data
- ‘Out-of-field’ teaching
- type of teacher training institution attended
- extent of training received in new curriculum
- upgrading courses attended.

Teacher training information has to be obtained from the various HEIs in the Western Cape regarding future teachers; while information about where current teachers have been trained may

also give an indication. Institutions' views on the potential pool of teacher trainees and on the extent to which bursaries have helped to increase the number of student teachers would be useful.

Much of the information has to be analysed at the school level, so that it can be established which schools battle with high learner/teacher ratios, teachers teaching learning areas/subjects for which they have not been trained etc, and where these schools are located.

On the basis of the data acquired, projections could be made regarding future demand and supply of teachers in the Western Cape, taking into account of budgetary constraints (what the Western Cape can afford in terms of number of posts, qualification levels and learner/teacher ratios); relevant policies that are likely to have an impact on either the supply (for example, a reduction in the number of years of training required) or the demand (for example, the introduction of Grade R and increasing numbers of learners going into FET after Grade 9).

Chapter 4 will elaborate on Phase 2 of the study, which included the design of data instruments based on the framework provided in this review as well as consultations with WCED officials and other experts.



## CHAPTER 4: INSTRUMENTS AND DATA COLLECTION

This chapter describes the instruments designed for the study; the sampling and data collection processes; and the data verification and capturing processes.

### 4.1 Data collection instruments

#### 4.1.1 School and teacher-level data

Three data-collection instruments were developed for use at schools:

- an Educator Questionnaire (EQ) for completion by WCED and School Governing Body-paid teachers
- a School Survey for completion by each school principal/deputy
- a data collection report form for each school – for completion by fieldworkers.

#### *Educator Questionnaire*

The intention of the EQ was to obtain information at each of the sample schools on every teacher's qualifications and subject specialisation, current teaching responsibilities and more recent INSET (in-service education and training) support received. The instrument developed thus covers teachers':

- personal details
- demographic profile
- formal education and qualifications
- current teaching post
- informal (non-accredited) curriculum-based INSET received.

Although INSET was not a main focus of the study, some information about attendance of short courses/professional development in the 2007 and 2008 was collected. The focus was on learning areas/subject-based INSET, as opposed to other more general forms of in-service training (for example, on outcomes based assessment). Essentially the EQ only asked teachers for information on INSET attendance in the last two years, as the original intention was to try to include available WCED information about teachers' INSET attendance in the study.

#### *School Survey*

The intention of the School Survey was to obtain information from school principals on teacher replacements, recruitments and shortages at their schools. The survey developed comprised nineteen questions covering:

- general school details

- staff turnover since January 2007 until August 2008 in order to establish:
  - the rate of teacher attrition (the number of teachers leaving)
  - the main reasons teachers are leaving
  - the type of teachers needing to be replaced
  - teaching positions filled since January 2007
  - staff replacements/recruitments to ascertain sources of teacher supply
  - the extent to which there is an under-supply of qualified teachers in primary and high schools per learning area/subject.

The main purpose here was to obtain information on the ‘outflow’ of teachers from public ordinary and special schools through promotion posts at other schools, and into the provincial education department; into posts at the same level at other WCED schools in the same districts, and in different districts. We hoped to obtain information from schools on the number of teachers leaving the WCED system to teach at private schools; to take up positions outside of the teaching profession; to teach in another province; to emigrate or to teach in another country; or due to ill health, permanent retirement or death.

The survey also gathered information on the ‘inflow’ of teachers at WCED schools by asking where teachers filling positions at schools since January 2007 until August 2008 had come from. For example, whether teachers appointed were newly qualified or were coming from other WCED schools; other provinces; private schools; other African countries, countries outside of Africa; or outside of the teaching profession.

The School Survey was also designed to collect information on phase and curriculum specialisation shortages in schools:

- For example, whether there were Further Education and Training (FET) subjects that the school would like to offer but do not currently offer, and the reason/s for not offering such subjects; and how many learners the principals think would be likely to take these subjects that are not currently offered at the school. A concern here was that the ‘real’ needs and preferences of learners and schools might be hidden if we only asked for information about the curriculum already offered at schools.
- Teacher supply and demand issues in general at the school, and whether there were any particular challenges associated with the appointment of qualified teachers to particular phases/learning areas/subjects at schools.

### ***Data collection report***

A report on data collection at each school was designed for completion by fieldworkers before leaving each school after administering the EQ. This report was important as it also required fieldworkers to include details collected on teachers who did not complete the EQ on the day of the visit to each school (for example, because they were absent on the day of the data collection, or because they are part-time and were not at the school at the time of the data collection), so that the researchers could keep track of whether or not these EQs were returned in the post.

#### **4.1.1.1 Instrument development**

Indicators and variables for the Educator Questionnaire and School Survey instruments were identified through consulting with various experts, drawing on existing WCED instruments and experience, as well as the literature survey. Initially the project researcher prepared and presented drafts of school- and teacher-level data collection instruments to the ESDA Oversight Committee for discussion. A challenge in designing the EQ, in particular, was ensuring that the data collected would be standardised. A strategy for this was restricting the number of questions where ‘free-text’ was required. For example:

- listing all the learning areas and FET subjects that could be offered at schools rather than asking teachers to provide these details.
- questions which required that respondents mark only one box with an X or, in other cases, more than one box with an X.
- questions that provided coded options, or which specified the units for responses. Respondents had to use the number codes to answer the questions with coded response options and not write the words. Options also included codes for ‘none’; ‘not applicable’; and ‘don’t know’ or ‘don’t remember’. An example is where a question reads:

<b>19. If you currently hold a School Governing Body post, how many <u>years</u> have you been in SGB service at the school (include this year)?</b>		<i>Write number of years</i> 98=I do <b>not</b> hold a SGB post 99= Don’t remember
--	--	--

- having only one question in the EQ where ‘free-text’ was required, namely when respondents were asked to provide reason/s for their answer.

Because we were surveying a large number of teachers, we needed to 'standardise' some of the response options so that the ESDA data collection process did not simply ‘reproduce’ existing ‘unusable’ WCED data. A major challenge was that of standardising data collected on teacher qualifications and subject specialisations so that different names, acronyms, Afrikaans and English versions of qualifications etc., would not be supplied by teachers and used by data capturers. However, because the list of possible response options for some questions about

teacher qualifications in the EQ was too long to be included in the body of the questionnaire, different keys listing coded options had to be developed.

The development of the ESDA EQ also had to take into account the WCED Human Capital online requirements in its design, for example, by asking teachers for the names of the institutions where they obtained their qualifications. The implication was that three keys needed to be developed:

- Key A – listing codes for a variety of academic and technical certificates, diplomas and degrees; and professional teaching qualifications
- Key B – which provided codes for the institutions where teachers might have obtained their qualifications
- Key C – which provided codes for subject/s, learning area/s or field/s of specialisation that teachers may have had in their qualifications.

#### **4.1.1.1.1 Keys**

To facilitate the task of compiling a list of possible teacher qualifications at different levels, Associate Professor Rob Siebörger (UCT) drafted the following framework that outlines different qualification routes that teachers in the study may have pursued:

**Table 4.1: Framework for teachers' qualifications, with examples**

**1. HIGH SCHOOL QUALIFICATIONS: SENIOR PHASE AND/OR FET**

Degree(s) + Teacher's certificate/diploma	Education degree	Teacher's certificate(s)/diploma(s) – 4 years	Teacher's certificate(s)/diploma(s) – 3 years	Teacher's certificate(s)/diploma(s) – 2 years
e.g. BA+HDE (Secondary); BSc (PGCE) (Intermediate and Senior Phase)	e.g. BA (Ed) BEd	e.g. HDE (Secondary) NHDE	e.g. DE (Secondary) STD	e.g. STC SEC JSTC

**2. PRIMARY SCHOOL QUALIFICATIONS: INTERMEDIATE AND/OR SENIOR PHASES**

Degree(s) + Teacher's certificate/diploma	Education degree	Teacher's certificate(s)/diploma(s) – 4 years	Teacher's certificate(s)/diploma(s) – 3 years	Teacher's certificate(s)/diploma(s) – 2 years
e.g. BSc Hons+HDE (Primary) BA+PGCE (Intermediate and Senior Phases)	e.g. BA (Ed) BEd	e.g. DE+FDE DE+ACE HDE	e.g. PTD DE (Senior Primary)	e.g. PTC (Senior Primary) PEC JSTC

**3. PRIMARY SCHOOL QUALIFICATIONS: FOUNDATION PHASE**

Degree(s) + Teacher's certificate/diploma	Education degree	Teacher's certificate(s)/diploma(s) – 4 years	Teacher's certificate(s)/diploma(s) – 3 years	Teacher's certificate(s)/diploma(s) – 2 years
e.g. BA+HDE (Junior Primary) BSocSc Hons PGCE (Foundation Phase)	e.g. B Ed BPrimEd	e.g. DE+FDE DE+ACE HDE	e.g. PTD DE (Junior Primary)	e.g. PTC (Junior Primary/Lower Primary) PTD (Junior Primary/Lower Primary)

**4. PRIMARY/PRE-PRIMARY SCHOOL QUALIFICATIONS: GRADE R**

Education degree	Teacher's certificate(s)/diploma(s) – 4 years	Teacher's certificate(s)/diploma(s) – 3 years	Teacher's certificate(s)/diploma(s) – 2 years
e.g. B Ed (Foundation Phase) BPrimEd	e.g. DE (Pre-primary)+FDE HDE (Pre-primary)	e.g. PTD (Pre-primary) HDE (Pre-primary)	e.g. PTC (Pre-primary) PTD (Pre-primary)

**Key**

ACE=Advanced Certificate in Education DE=Diploma in Education FDE=Further Diploma in Education HDE=Higher Diploma in Education NHDE=National Higher Diploma (Education) PTC=Primary Teacher's Certificate	JSTC=Junior Secondary Teaching Certificate PEC=Primary Education Certificate PGCE=Postgraduate Certificate in Education PTD=Primary Teacher's Diploma SEC=Secondary Education Certificate STC=Secondary Teacher's Certificate	STD=Secondary Teacher's Diploma
--	--	---------------------------------

A major challenge was that the data collection needed to be aligned with WCED requirements, so that the information collected could later be integrated into existing WCED systems. With the format of the WCED Human Capital leave form in mind, the ESDA team formulated an extensive and quite specific list of possible *qualifications* for the EQ, as opposed to broad categories of qualifications (for example, Matric + 3 years of training; M + 4 years of training; or a 'general first degree'; 'Honours degree', etc.). We also needed to know for which level/s of schooling teachers had been trained.

Clearly compiling a comprehensive list of the names of all possible qualifications that teachers might have would be difficult and complicated. For example, although the two current qualifications pathways for initial professional education of teachers (IPET) are a four-year B Ed or a Degree plus a Post-graduate Certificate in Education (PGCE), there is a range of first general degrees that in-service teachers might have taken, for example, B Bibl, B Mus, B Econ, B Bus Sc. There is also a range of performers' diplomas in music, dance and drama, and qualifications from 'other' institutions, such as Typing, Bookkeeping, Computers, Educare, as well as a number of Technikon qualifications such as N diplomas and technical college qualifications, such as N4, N5, N6, which had to be accommodated.

Furthermore, we anticipated that there would be teachers in schools who qualified at least as far back as the 1960s, thus archival information on teachers' qualifications would be required. In addition, because of the fragmented education system that existed in South Africa prior to 1994, and changes in the type of qualifications obtained and required over time, there would be 'messiness' with regard to the range of qualifications obtained across different education departments, and the names given to the qualifications by different teacher training institutions.

Although there were many regulations in education in the *pre-1994 dispensation*, there were more than fifteen different employing authorities for teachers (including provincial and 'homeland' education departments) and no cohesive national policy for teacher development existed at government level. In terms of accreditation of qualifications, there was no co-ordinated accreditation between the various apartheid education departments. As accreditation was not actually co-ordinated between education departments, teacher training institutions had to ask different education departments, for example, the Department of Education (DET), to recognise a particular in-service course as a qualification for teachers serving under a particular education department. A variety of types of qualifications were offered of differing quality.

Indeed no such thing as formal accreditation of teacher education existed in South Africa until the National Education Policy Act 39 of 1969 was enacted, and the Committee of Heads of Education

(CHED) was given the power to advise the Minister on policy regarding teacher education. The Department of Education and Culture (DEC), House of Assembly (HoA) – the ‘white’ system – used the CHED and the *Criteria for the Evaluation of South African Qualifications for Employment in Education* (DEC, 1993), that had been developed for evaluation purposes. Although most other education departments in the South Africa followed the same Advisory Committee for Universities and Technikons and CHED route as the HoA system for obtaining recognition and sequencing of qualifications, this ‘Criteria’ document that had been developed for teacher education suited the more ‘developed’ education system pertaining to the House of Assembly i.e. teachers who had obtained a Matric/Std 10. Specifically, although provision was made for teachers with Senior Certificate/Matric + 2 years training to be trained to M + 3, there was no provision in the *Criteria* for teachers who had M + 1 and less than Matric/Std 10.

Yet, before Std 10 became the minimum entrance requirement at all colleges of education in South Africa, there were many mainly African and ‘coloured’ teachers in the field who had completed two or three years of professional training without Std 10. These teachers mostly held Std 7/8 and two-year Primary or Secondary Teachers’ Certificates. When qualification requirements were changed such teachers were required to pass Std 10 in order to upgrade their qualifications to be permitted to enter the M + 2 year of a three-year teacher’s diploma at colleges of education.

In the DET (‘African’ system), if teachers did not have a Senior Certificate/Matric there was no means for them to upgrade their qualifications until they had obtained their Senior Certificate. However, in the DEC, House of Representatives teachers (from ‘coloured’ colleges of education) with Std 8/Junior Certificate (JC) and two years Teacher’s Certificate (TC) and a minimum of eight years satisfactory experience were accepted as M + 1 and allowed to enter the second year of the Diploma in Education (DE). Some HoR teachers had a JC + 2-year TC followed by a specialist course in either an academic or practical subject. If these teachers did a practical specialist third year (for example, Physical Training), they were allowed to go into the third year of their DE. If they did an academic specialist course (for example, Kindergarten), they could only go into the second year of their DE.

Teachers with a Std 8 + 2 years + Matric had to do a four-year part-time course in order to complete the remaining two years of a DE. For other teachers who already had Matrics before they had obtained a two-year Teachers’ Certificate, because this qualification was a certificate and not a diploma course, their certificate was only acknowledged as a first year course regardless of whether they had obtained their Matric before or after their two-year certificate. In other words, teachers with Matric + TC had completed two full-time years of initial professional training plus four years part-time study in order to obtain a Diploma in Education.

Although the M + 1 level was the lowest qualification/admission requirement for in-service teachers to enter part-time courses, there were also in-service DET and ‘homeland’ teachers with Matric and no professional training.<sup>10</sup> Shoshinguve College for Continuing INSET Education had been established specifically to provide upgrading for in-service DET teachers who had Matric and at least three years teaching experience. In the early 1990s this College was the only college that was allowed to offer a M + 1 year Primary Teachers’ Diploma (PTD) through correspondence. Once these teachers obtained their M + 1, their one-year PTD served as entrance to the Diploma in Education. In order to qualify for a three-year DE, such teachers had to study for six years part-time. In other words, such teachers had a Matric, three years experience, a PTD 1 and a DE 3. Full-time and correspondence colleges in the various education departments ran similar M + 3 upgrading courses for under-qualified teachers.<sup>11</sup> This, together with a fourth year Higher Diploma in Education (HDE), was the most common provision made for upgrading.

By the early 1990s, House of Assembly teachers were required to have a four-year qualification. Two kinds of Further Diploma in Education (FDE) were also being offered – a re-training FDE (fourth year) and an Advanced (fifth year) FDE. The minimum requirement for the FDE re-training and an HDE was a three-year Diploma in Education. For the FDE Advanced, the access requirement was a four-year diploma (M + 4). However, only two teaching diplomas counted for salary purposes. Matriculated students at that time could also obtain a four-year initial primary school professional qualification, a B Prim Ed, through universities. A one-year B Ed degree (M + 5)<sup>12</sup> could only be awarded after gaining a first degree. Whilst the minimum requirement for House of Assembly secondary school teachers was first degree followed by a one-year Post-graduate Diploma in Education, most DET and House of Representatives teachers had three-year Secondary Teachers’ Diplomas (STD).

*The norm for all qualified teachers in South Africa is now shifting to M + 4.* The main routes for in-service teacher upgrading and retraining (i.e. continuing professional development for teachers who have current experience in schools) currently are:

- the National Professional Diploma in Education (NPDE) which was introduced in 2002
- the Advanced Certificate in Education (ACE).

---

<sup>10</sup> Such teachers served under 24 hours notice and received no benefits such as pensions, medical aid or housing subsidies.

<sup>11</sup> The emphasis in many upgrading programmes was on achieving equivalence and most teachers enrolled for them because they got salary recognition for their studies. Qualifications mostly served as a device for teachers to gain further categories for salary purposes.

<sup>12</sup> A one year B Ed degree in this context is the equivalent of an Honours degree.

**Key A: Qualifications**, was developed for the ESDA Educator Questionnaire, comprised two parts:

- **Part 1** lists academic and technical certificates, diplomas and degrees including all Masters and Doctoral degrees (including in Education)
- **Part 2** lists professional teaching qualifications.

Both Parts 1 and 2 have separate sections for coding foreign or non-South African academic/professional teaching qualifications. As there are also teachers with qualifications not recognised by the Education Department: Early Childhood Development (ECD) (particularly for Grade R) and Adult Basic Education and Training (ABET) qualifications<sup>13</sup>, Part 2 of the key includes a section listing Adult Education and Early Childhood Development qualifications. Also included are practical or performance music, drama and ballet qualifications.

In the process of compiling this ‘standardised’ list of possible teachers’ qualifications, the ESDA team drew on teachers' responses in previous attempts by WCED to collect the data on teacher qualifications in open-ended questions as an archive. The team consulted with and drew on the knowledge and experience of Associate Professor Siebörger. In addition the ESDA had received parts of the draft DoE survey instrument from SAIDE (responsible for developing the national instrument); as well as a basic document on qualifications compiled by the Head of the Evaluation of Qualifications and Programmes (EQP) unit, Martiens Loots, which contained a diagram of the 8-level qualifications framework from the Norms and Standards for Educators (DoE, 2000a) which the HSRC would use in their handbook to train their fieldworkers of the DoE survey. The ESDA project researcher communicated with Tessa Welch at SAIDE and Martiens Loots of the DoE, who were assisting with qualifications and subjects for the national survey, regarding the ESDA ‘standardisation’ of qualifications and the clustering and coding of subject specialisations and their aligning with the current school curriculum requirements.

ESDA was particularly interested in establishing whether all the qualifications in the longer and more specific list of qualifications that was being developed for the ESDA EQ (with the needs of the WCED Human Capital leave system needs in mind) were covered by the broader academic and professional categories employed in the DoE survey. Some of the issues raised and clarified through these interactions were:

- B Ed Hons falls under ‘academic’ qualifications rather than ‘professional’ qualifications. The ‘new’ four-year B Ed falls under professional qualifications, whilst the ‘old’ (one-year) B Ed falls under academic qualifications. The idea is that the B Ed Hons is about theory and research and preparation for academic study of education, although it may be

---

<sup>13</sup> Certain ABET qualifications are recognised by the DoE for employment but only in ABET centres.

in a subject specific field such as Mathematics Education or Education Management. It is not an initial qualification, and not an ACE (Advanced Certificate in Education), which is exclusively focused on improvement of further professional teaching. This distinction is the position of the Ministerial Committee on Teacher Education, and has been intensified in the Higher Education Qualifications Framework (HEQF). It was also the basis for the division of qualifications in the work of the Educators in Schooling Standards Generating Body.

- In the former Technikon sector, one may find the following: a general three-year National Diploma, for example, in Engineering or Commerce followed by a one-year National Higher Diploma or later on a one-year B Tech: Education (Secondary) or a three-year National Diploma Education (Commerce, for example) followed by a one-year Higher National Diploma or B Tech Education or a four-year National Higher Diploma or B Tech Education (Secondary).
- B Phil is a South African qualification that is an advanced degree and usually interdisciplinary, an example is the B Phil Maritime Studies from Stellenbosch University. (Maritime Economics is included in the list of FET school subjects.)

Associate Professor Siebörger was then able to compare the ‘standardised’ list of qualifications that the ESDA team had been working on with the categories developed for the national survey and point out gaps and incorrect/unnecessary information on the ESDA list. He made recommendations as to how the ESDA could augment the list as well as other suggestions or refinements in relation to capturing qualifications information.

The EQ needed to make it very clear that our interest was in information about qualifications directly related to education, teaching and schooling, not *all* the qualifications that teachers have. Qualifications that teachers were asked to list had to be post-Matric level, except for any training college qualifications that had Std 8 as an entry requirement. All qualifications entered should have required at least one year of full-time study (two years of part-time study).

Arranging the information on Key A and coding of qualification so that differences between particular qualifications were distinguishable for respondents was another challenging task. For example, the list needed to make clear distinctions between codes for:

- a Higher Diploma in Education from a teacher training college which comprised four years of initial training; a National Higher Diploma (Education) from a Technikon; a Higher Diploma in Education after an initial three-year diploma in education; and a post-graduate Higher Diploma in Education (after a degree)

- a four-year B Ed; a one-year B Ed after an initial degree; and a B Ed conversion of a diploma to a degree
- a Std 8 plus a Teachers' Certificate; a Senior Certificate plus a Teachers' Certificate; an Advanced Certificate in Education (*after* a diploma or degree); and a Post-graduate Certificate in Education (after a degree).

**Key B: Institutions**, provided a list of codes for 412 institutions where teachers might have obtained their qualifications. This list was compiled under six headings: Universities in South Africa; Colleges of Education; National Institutes; Technikons; FET/VET/Technical Colleges; and other private or foreign institutions in South Africa (to accommodate cases where teachers had a qualification from a theological college, nursing college, agricultural college, secretarial college, business college, etc.). The process of compiling a list of national institutions was difficult because many of the institutions where teachers have studied no longer exist. Prior to 1995 Colleges of Education were mainly responsible for initial teacher training and education especially of primary teachers.<sup>14</sup> More than 120 state-funded Colleges of Education had operated across the country in South Africa including the various 'homelands'.<sup>15</sup> None of these colleges exist today – they have either closed or have been absorbed into Higher Education Institutions. Many other institutions that offered teacher education (universities and technikons) have merged, through the state's restructuring process, with other Higher Education Institutions and have changed their names.

For Key B, the ESDA team drew on existing WCED data and a search on the internet. The process of compiling the list of Teacher Training Colleges was also assisted by work in progress by Professor Peter Kallaway who had been contracted by the Council on Higher Education (CHE) to compile a list for the Teacher Education Review.

**Key C: Subject specialisations**, was compiled by the ESDA team through a process of using the 'blue' COTEP (Committee on Teacher Education Policy) documents (1996 and 1999)<sup>16</sup> as an archive of recognised subject specialisations but also drew on teachers' responses in earlier attempts by WCED to collect the data on teacher qualifications in open-ended questions as an archive. Excluded from the list were more general Education courses such as 'Pedagogics'; 'History of Education'; 'Philosophy of Education'; 'Sociology of Education'; 'Didactics', etc. as

---

<sup>14</sup> Universities generally trained secondary school teachers.

<sup>15</sup> In the past, full-time colleges of education were not allowed to offer Distance Education courses. Whilst most urban teachers could attend part-time contact courses at colleges, technikons or universities, rural teachers in particular had to rely on distance learning universities like VISTA and UNISA, or on distance learning colleges of education like Shoshinguve, Roggebaai, Umlazi, Natal and Springfield.

<sup>16</sup> The first COTEP document came out in 1994. This document was later formalised as a policy document, *Norms and Standards for Teacher Education* (2000a).

these are not ‘subject specialisations’ related to the curriculum. This initial effort to compile a comprehensive subject list was sent to SAIDE to integrate into discussions with others involved in the national supply and demand initiative. Tessa Welch was able to use our ESDA list to cross check with the 1999 *Criteria* document (which was similar to the COTEP document we had used) and the 1994 *Criteria* document as a basis for compiling a list for the DoE survey. After consulting the list of approved Adult Education qualifications in the 2000 *Criteria* document (DoE, 2000b), she had added some Adult Education information and ECD as a subject that can be taken in a degree/qualification.

An aspect that the ESDA team also noted with regard to FET school subjects listed in the DoE teacher survey instrument, was that subjects like Equine Studies; Maritime Economics; Nautical Science; and Sport and Exercise Science were, as far as we were aware, not on the DoE lists for Grades 10-12 (Schools). However, Tessa Welch informed us that they were on the latest list for the new National Curriculum Statement subjects, and sent us a copy of the 2008 list.

The school level instruments and the three related keys were all drafted in English in line with the HC-LMS portal which uses English only. A major challenge in constructing the keys was that archival databases of possible teacher qualifications, training institutions and possible subject specialisations are not readily available or up-to-date. This information is crucial given the system changes and curriculum changes that have taken place, and given the fact that there are teachers teaching in schools who qualified in the 1960s.

#### **4.1.1.2 Reliability and validity**

It was essential that data collected and used for the EDSA research was reliable and valid. Because data collected through teacher questionnaires would comprise self-report data, the most reliable way of validating data collected on teacher qualifications was obtaining physical proof of teacher qualifications. The ESDA team ideally had to verify qualification information by accessing hard copies of qualifications and certificates and then checking details on the hard copies for triangulation with data collected through the questionnaires.

Some ideas and questions arising out of discussions around how best to access this data were:

- Copies of qualifications could be requested from teachers who could be asked to append hard copies of their qualifications/certificates to questionnaires. Some schools might also have copies of teachers’ qualifications in their own records. It may also be possible for the WCED personnel files to be used to check for missing copies.

- If ‘true’ data on qualifications already existed in teachers’ personal files in the WCED in the form of hard copies of qualifications, the WCED could be asked whether the ESDA project, with due regard for confidentiality, could access information held in teachers’ personal files on qualifications records.
- Alternatively, WCED staff could be asked to verify information internally using personnel files. Here it was noted that the 2005 CEMIS census form had stated that ‘certified copies of proof of qualifications *may* be attached for all qualifications not yet on file at head office’. Apparently this was because, when teachers apply for posts they have to provide certified copies of their qualifications but when they upgrade or get further qualifications, they may not necessarily have supplied copies. A possible constraint with using records in teachers’ PERSAL files is that – when higher qualifications were no longer linked to salaries – personnel records may not have been kept up to date and teachers’ files or records may not always have copies of all their certificates/ qualifications.
- If it was not practical to check all teachers’ qualifications<sup>17</sup>, perhaps a sample of personnel records could be checked as a partial verification of qualification data process.
- Also worth considering was the possibility of checking alignment between PERSAL data, the 2005 CEMIS (neither cleaned nor validated) data and the data collected through the ESDA as a form of triangulation. This would depend on how easily the ESDA could get the various data sets on each teacher to align.

What needed to be made explicit was:

- the data verification challenge, and the minimal levels of verification required for the report to be reasonably robust
- an unfolding slower process of composite verification that could and should follow.

Also unknown (at the start of the project) in relation to the verification process was the extent to which all of a teacher’s qualification documents contained or would include transcripts of the subjects taken.

#### **4.1.1.3 Piloting**

On 24 July 2008, a pilot administering the EQ, its Keys and the School Survey was undertaken to iron out any problems before the instruments were finalised. For the pilot, teachers were asked beforehand to bring copies of their qualifications to attach to their EQ.

---

<sup>17</sup> Apparently automated smart search systems, that search by scanning documents with disparate data using a discipline-based thesaurus, do exist but are expensive.

The pilot established that fieldworkers and schools needed to allow one and a half hours for completion of the EQ by teachers. As the WCED wanted the visits to be conducted with minimal disruption to schools, a proposal arising out of discussions with WCED officials was that a WCED letter be sent to all principals requesting that one and half hours at the end of the school day be set aside for the entire staff to meet in one venue to complete the EQ at the same time. As the EQ also had to be completed by teachers in SGB posts who may be part-time, and any teachers who were absent on the data collection day, each school was to be given a postage paid envelope addressed to the ESDA project researcher for EQs that were completed after the school visits had taken place.

We wanted to safeguard the quality of the data collected so that the ESDA data collection process did not simply 'reproduce' existing 'unusable' data. Emerging from the pilot was the realisation that, because of the complexity of the data being collected<sup>18</sup>, more than one fieldworker would be required per school to assist with the Keys, and that schools with more than 75 teachers would need three fieldworkers. This obviously had budgetary implications.

#### **4.1.2 Student Survey**

A Survey was designed to collect data on 2008 Higher Education Institutions student graduates' employment or other intentions once they have completed their initial teaching qualifications. This questionnaire, for administration at all four of the Western Cape HEIs involved in teacher education, collected demographic information (age, gender, home language, nationality); information about bursary obligations; and qualification details including school level and main learning area/subject specialisation of new entrants into the profession.

It also asked students whether they had a teaching post for 2009, and for students' phone and email contact details so that each HEI could implement a graduate 'tracking' database of graduates through phone and email follow-ups in future.

#### **4.2 Sampling frame**

As outlined in Chapter 1 and 2, after carefully assessing the situation, a decision was taken to collect data on a very carefully selected sample of WCED public ordinary and special schools rather than on the whole population.

---

<sup>18</sup> This was exacerbated by the fact that locating the correct codes for qualifications on the Keys was not simple and an online electronic system (for example, with drop-down menus) was not available.

The original brief for the study had been for school-based validation of data on a 10% sample of the total population of schools (that is, verification at approximately 150 schools).<sup>19</sup> A sampling option was to sample one eighth of each of the new Education Districts<sup>20</sup> to obtain a stratified representative sample within each Education District. However, in order to work within the project's budget and timeline, rather than simply sampling a percentage of all public schools in the Province, it was decided that the sample would be limited to two relevant Education Districts.

A decision was taken to select one rural and one urban Education District and then to sample within that reduced population. More specifically, a sample of 151 schools was to be drawn from two of the eight new WCED Education Districts, namely:

- Metro East Education District (an urban district)
- Eden and Central Karoo Education District (a rural district).

The Eden and Central Karoo District includes schools situated in and around towns such as Beaufort West, Herbertsdale, Laingsburg, Heidelberg, Uniondale, Albertina, Oudtshoorn, Riversdale, Ladismith, Pacaltsdorp, Murraysburg, Prince Albert, Mossel Bay, George, Knysna, Plettenberg Bay, etc.

The Metro East District includes schools situated in and around areas such as Khayelitsha, Eersterivier, Blackheath, Kraaifontein, Bellville, Gordons Bay, Somerset West, Strand, etc.

According to available WCED data on 30 April 2008, there were 229 public ordinary schools and 5 special schools in the Eden and Central Karoo Education District, and 136 public ordinary schools and 10 special schools in Metro East Education District (that is, a total of 15 special schools in the two Education Districts).

For the school sampling frame to be agreed upon, the ESDA needed to determine if any factor/s (i.e. features or attributes of schools listed) that are thought likely to dominate an understanding of teacher supply and demand phenomena. Attention could then be focused on sampling, in a balanced fashion, for each factor. In other words, these factor/s could be used to split the schools into subgroup/s, and then similar fractions or proportions of each subgroup of schools could be taken into the sample, by random selection within subgroups.

---

<sup>19</sup> According to WCED data provided in January 2008, there are 1 451 public ordinary schools in the Province - 313 secondary schools, 41 combined schools, 177 intermediate schools, and 920 primary schools. Primary schools are in the majority.

<sup>20</sup> Education Districts have replaced Education Management and Development Centre (EMDCs). The four new urban Education Districts are – Metro North, Metro South, Metro East, Metro Central; and the new four rural Education Districts are – West Coast, Cape Winelands, Eden and Central Karoo, and Overberg.

For this procedure, a list of all public ordinary and special schools in the two Education Districts was required, ideally giving details of their:

- new Education District name/number
- old EMDC name/number
- setting: urban, suburban, rural
- type or level: primary, secondary, etc.
- language of learning and teaching (LOLT) category
- number of learners
- number of WCED teachers
- number of SGB teachers
- Other important feature/s or criteria that WCED officials and others with direct experience of schools in the Western Cape considered pertinent in relation to teacher supply and demand, for example, poverty quintiles.

After discussions with relevant parties within the WCED, factors that were taken into consideration in selecting 151 schools included: quintiles (as measures of community poverty); distance from urban centres; and school size.

The sample of *Eden and Central Karoo* schools selected comprised 77 public ordinary schools (35% of ordinary schools in the District) and 1 special school (20% of the total). The ordinary schools selected comprised:

- 22 secondary schools
- 51 primary/intermediate schools
- 4 combined schools.

The sample of *Metro East* schools selected comprised 72 public ordinary schools (53% of ordinary schools in the District) and 1 special school (10% of the total). The ordinary schools selected comprised:

- 30 secondary schools
- 40 primary/intermediate schools
- 2 combined schools.

Grade R-12 teachers at the schools were to be included in the sample as were teachers in SGB posts. Teacher assistants were not included in the brief for the research.

### **4.3 Data collection**

#### **4.3.1 School and teacher level data**

Data collected via the Educator Questionnaire and the School Survey were complementary so both data sets had to be collected from the sample schools.

Because the EQ was complicated, mainly because it attempts to 'standardise' responses related to qualifications, it had to be mediated for teachers by fieldworkers. In particular, respondents would need assistance with selecting the relevant qualification and related number code from the three different lists provided in Keys A, B, and C. For this reason more than thirty suitably qualified and experienced fieldworkers were accessed through the Schools Development Unit (SDU) at UCT to conduct face-to-face data collection at the sample of schools.

##### **4.3.1.1 Fieldwork planning and training**

Planning for direct data collection at the sample schools took place towards the end of July and at the beginning of August 2008. Logistics involved:

- obtaining WCED assistance and guidance in contacting and communicating with schools
- emailing and faxing to all 151 schools a copy of a letter signed by the Acting Chief Director: Districts, WCED giving permission for the research to be conducted in August. As the WCED wanted the visits to be conducted with minimal disruption to schools, the WCED letter requested that one and half hours at the end of the school day be set aside on the day of school visits for the entire staff to meet in one venue to complete the questionnaire at the same time.
- sorting and packaging of questionnaires and other items for each school; a school package included a copy of the School Survey, enough copies of Educator Questionnaires per school for all teaching staff (this sufficiency entailed first establishing approximate staff size at each school); a data collection report form; a box of paper clips (for attaching qualifications); and a self-addressed pre-paid A4 envelope to be left with the principal to post questionnaires completed by teachers who were not present when the EQs were administered. Each fieldworker also received a set of 20 Keys, pencils, erasers, and sharpeners (to be collected for re-use at each school they visited).
- developing a fieldwork management plan in collaboration with the SDU which included a breakdown of site visits
- deciding which fieldworkers were to undertake which visits and allocating schools to fieldworkers
- developing a training manual to guide fieldworkers in the data-collection tasks

- training fieldworkers located in Cape Town on 4 August and fieldworkers located in the Eden/Karoo District on 6 August 2008
- contacting the sample schools at the beginning of the third school term via email, fax and telephonically to arrange the site visits during the period 11 to 28 August
- emailing the School Survey to each school in advance as an attachment<sup>21</sup> in preparation for the visit to facilitate the completion of the School Survey by the school principal. Principals were also informed that, if required, fieldworkers would explain the survey in detail when they visited the sample schools.
- sending letters to principals asking all WCED-paid and SGB-paid teachers to prepare in advance to answer a question about how many hours they actually teach in a typical school week; to provide their PERSAL number, ID number, SACE (South African Council of Educator's) registration number; and to bring photocopies of all post-school qualifications that are directly related to education, teaching and schooling so that these copies could be attached to each teacher's completed questionnaire. The letter to schools also asked principals to have the summary of the number of teaching hours per teacher and the school timetable available.
- phoning schools to confirm dates for the school visits and, where necessary, making special arrangements to accommodate schools that were not available on the day as planned so as to maintain integrity of the sample
- follow-up phone calls, emails and faxes with any changes in dates that had been negotiated by schools.

Fieldworker training took place in Cape Town on 4 August and in George on 6 August. The training manual was used to train fieldworkers in data-collection tasks. The following are some of the general guidelines and principles that were provided to fieldworkers as applying to the data collection process:

- When administering questionnaires, fieldworkers were to use the wording of the questions on the instruments and ask the questions in the given sequence or order.
- Fieldworkers were to try to obviate any 'missing' responses by ensuring that responses were fully completed for all questions.
- As far as closed or coded questions were concerned, fieldworkers were to try to ensure that respondents kept additional written comments to a minimum unless they found the coding categories totally inadequate.

---

<sup>21</sup> The Educator Questionnaire was not sent to schools in advance, as the EQs and Keys needed to be mediated for educators.

- All information on schools and teachers obtained as a result of data collection was confidential and was not to be discussed with persons outside of the data-collection process or the research project.
- All respondents were to be treated with the utmost respect. Fieldworkers were not to react defensively to any questions or queries but to be understanding and persuasive rather than pushy.
- It was crucial that fieldworkers made sure that they were very familiar with all the instruments and the keys before embarking on the data-collection process.

Fieldworkers were also alerted to the fact that they might need to justify the inclusion of a question identifying teacher's population group when they were administering the EQs, and explain that the main reason for this question was that at a national level research has shown that very few young African women are entering the teaching profession, and that, with the need for mother-tongue instruction especially in primary school, this tendency is of concern.

On the day fieldworkers were to administer a) the School Survey to the principal and b) Educator Questionnaires to every teacher including the principal and all members of the school management team at the school. As the plan was to collect data from every teacher at the school, it was crucial that all schools were reached in time to cover all the necessary data collection procedures. It was thus important that fieldworkers established exactly where each school was located before the day of the visit, so that there would be no delays finding schools on the day of the visit. The School Survey was to be completed before the end of the school day and fieldworkers needed to allow enough time to introduce themselves to the principal and staff. Hence fieldworkers had been instructed to arrive at schools at least two hours before the time set aside for all teachers to meet, so that there was time to complete the School Survey with the principal/deputy if necessary.

#### **4.3.1.2 School visits**

Data collection at the sample of schools took place between 11-28 August 2008. Most schools were visited on one day by two fieldworkers. A maximum of three fieldworkers was allocated to schools in those cases where schools had a very large complement of teachers (for example, 70), and one fieldworker was allocated to schools with very low staff numbers (for example, 10).

On arrival, fieldworkers introduced themselves to the school principal, or in his or her absence, to the deputy/person acting as principal/a member of the school management team. Where necessary, fieldworkers explained that the purpose of the study was to try to establish teaching

staff needs in all phase levels and learning areas/subjects and to assist the four universities in the Western Cape and the WCED to respond to schools' teaching supply and demand requirements. As soon as possible, they confirmed the data collection plan with the principal/deputy and established the earliest time that they could deal with the School Survey.

### ***Protocol for the School Survey***

It was hoped that most school principals would have at least looked at the School Survey (which had been emailed to schools) in advance and that some may even have completed the survey in the interim. Whilst some principals only wanted assistance with parts of the School Survey, most required fieldworkers to go through the whole School Survey together with them. In schools where principals had already completed the survey, fieldworkers spent time checking the completed survey so that any missing responses or queries could be addressed.

At most of the sample schools, the School Survey was completed by the school principal/acting principal/deputy principal. Only where this was impossible, did a senior teacher/head of department or another member of the school management team complete it.

### ***Protocol for the Educator Questionnaire***

The EQ was to be completed by every teacher present at each school on the day of the school visit including the principal, all members of the school management team, and all classroom teachers including those in SGB paid, temporary and part-time posts. For the census at each school to be complete, the questionnaires also had to be completed by all teachers who were not present on the day (WCED and SGB-paid; and part- and full-time posts).

On the day of the visit fieldworkers either introduced themselves to staff, or were introduced by the principal or the person deputising. They briefly explained the purpose of the study, emphasising that the purpose was to assist the four universities in the Western Cape who are responsible for teacher education to respond to the needs of schools and the WCED. Because the data collection instruments were only available in English, depending on the home language of most of the teachers, fieldworkers sometimes needed to translate and explain the questions in Afrikaans or isiXhosa. Teaching staff was also asked to work together with their colleagues when they completed the EQ, so that they could assist one another if necessary. As fieldworkers went through the EQ with the staff, they tried to ensure that everyone was working on the same question/s at the same time.

Fieldworkers explained the coding system and tried to ensure that teachers had written responses for all questions and were completing the questionnaires correctly. When the section on

qualifications was covered, fieldworkers alerted teachers that, whilst a particular section of the questionnaire dealt with completed qualifications, another section dealt with qualifications for which teachers were still busy studying. They also explained that the qualification tables were to be read across each row and that the details for each qualification needed to be written in a separate row.

Because the section on teacher qualifications was complex and required the use of the Keys, fieldworker assistance with explaining the use of the Keys for answering the questions was crucial. Key A was to be used to identify codes for qualifications, and had two parts. Part 1 listed Academic/Technical Certificates, Diplomas and Degrees. Part 2 listed Professional Teaching Qualifications. Where necessary, fieldworkers assisted staff to find the code/s for each qualification that they had completed. This explanation was important because teachers sometimes assumed they have found the code for the right qualification (for example, Higher Education Diploma/HDE) when in fact the code was for a four-year and not a one-year post-graduate or post-diploma qualification; different codes were provided for a four-year initial teaching HDE, a one-year post-teaching diploma HDE, and a post-graduate HDE – after a degree. Fieldworkers also needed to ensure that teachers had listed all their qualifications and had not omitted any of their completed qualifications.

Fieldworkers needed to explain that Key B listed institutions under six headings: Universities in South Africa; Colleges of Education; National Institutes; Technikons; FET/VET/Technical colleges; and Private or foreign institutions in SA and assist staff where necessary in identifying the codes.

Fieldworkers had to explain that Section C of the questionnaire collected information on teachers' current teaching post and responsibilities. If teachers did not already know how many hours they currently teach, they needed to calculate the hours from the number of periods they teach per week/cycle to answer the question. They were asked to count the number of periods and convert the periods into hours and minutes, and then round off the number of hours to nearest half hour.

Where there were questions of a sensitive nature, fieldworkers pointed out to respondents that they were provided with the option 'Prefer not to answer' if they did not wish to disclose information. Fieldworkers also reminded teachers to attach copies of their qualifications to the questionnaires either by stapling them onto the back page or by using a paper clip provided. Before leaving the room, they checked that the required number Educator Questionnaires had actually been collected and completed and indicated on the cover page of each completed questionnaire whether or not copies of qualifications were attached.

Before leaving each school, fieldworkers gave the principal/deputy a copy of the Keys and enough blank EQs for all absent teachers (including all SGB-paid posts) to complete. Principals were asked to use pre-paid, self-addressed A4 envelopes provided to post any additional completed questionnaires and outstanding copies of qualifications to the ESDA project researcher. The importance of carrying out a complete census of all teachers including SGB-paid and part-time teachers at the school was stressed so that the ESDA could obtain a true picture of teacher supply and demand at the school.

At the end of each school visit, fieldworkers completed a report on the data collection and thanked the principal/deputy for his/her co-operation and assistance before leaving the school.

The data collection reports revealed that overall teachers and principals at schools were compliant when it came to completing the data collection instruments, particularly in rural areas. However, fieldworkers did encounter resistance in some quarters to participation in the study. At some schools principals were initially loath for their schools to be part of the study as they felt that their school programmes were already too full to accommodate the fieldwork and did not want any school time to be wasted. Some teachers were cynical about the Education Department or not keen on doing the extra paper-work, and took some persuasion. At other schools there were teachers who were passively resistant or even openly hostile and very suspicious about providing their details and qualifications. Some teachers seemed threatened by the possibility of losing their posts if they were not deemed adequately qualified, etc. A small number of teachers actually refused to complete the Educator Questionnaires.

When fieldworkers arrived at one of the primary schools in the Eden and South Karoo Education District, they found that the school had been split into two schools (a junior primary and a 'primary' school) both with their own principals. Data were collected at both these schools.

#### **4.3.1.3 Quality assurance**

A team of five people (including members from the SDU at UCT, the ESDA project researcher and assistant researcher) was responsible for quality assurance of the fieldwork and for ensuring the data collection was done within the planned timeframe and within budget.

Before administering the Educator Questionnaires, fieldworkers tried to obtain a staff list at each school they visited so that they could keep track of the number of teachers present when the EQs were administered and note the names of teachers who were absent on the data collection report. Constraints were that not all schools could provide staff lists and some schools had lists that were out of date or had incorrect or incomplete information. Quite a few staff lists were not organised

in alphabetical order and this made it very time consuming to cross check which teachers had completed questionnaires, especially at schools where a large number of teachers' surnames started with M.

Besides giving each school principal a pre-paid envelope to post outstanding information, other plans put in place to deal with 'missing' data (for example from teachers who did not complete the questionnaire because they were absent on the day of the data collection or from teachers who did not bring copies of their qualifications) included follow-up emails, faxes and phone calls, and, in some cases, direct collection through visits to schools. Although most of the instruments were completed during the on-site visits at school, some principals also used the pre-paid envelopes to send outstanding School Surveys and EQs.

#### **4.3.1.4 School Survey bulk email to WCED schools**

The *School Survey* (which had been completed by principals at the sample schools), was also sent via the WCED bulk email facility to all WCED public ordinary and special schools in the province. The WCED translation services first translated the survey into Afrikaans so that Afrikaans versions could be sent to schools where Afrikaans is the language of instruction. WCED support was also received with ensuring that schools received the School Surveys so as to maximise response rates. School principals were asked to fax or post the completed surveys to CHEC. The WCED also posted hard copies of the survey to all the schools in case they had not received the initial email. A follow-up email was sent to schools reminding those principals who had not completed the forms by the due date (mid September) to send their completed surveys.

The questionnaires received by fax and post were collated and checked as they were returned. However, a limitation regarding collection of this data is that most schools opted to fax through their completed surveys rather than to post them, and the CHEC system was not able to cope with receiving such a large number of faxes. Schools often struggled to get through on the fax line and, because a fax email system was not in place, not all faxed pages of each Survey received always printed – which necessitated follow-up phone calls to schools. Essentially because the process was inconvenient for schools, returns were not as high as it had been hoped.

Before the data were captured, free-text written in Afrikaans had to be translated into English for analysis.

#### **4.3.2 Student teacher graduate data**

The focus here is on 'new' graduates or entrants into the workforce rather than on the total number of education students enrolled at HEIs, as it was considered important to distinguish between the supply of new teachers, and teachers who are already employed by the WCED or

who seek to re-enter the profession and who are enrolled for upgrading or Continuing Professional Teacher Development (CPTD) qualifications (for example, National Professional Diploma in Education (NPDE) students). In particular, the ESDA hoped to gauge whether the four universities in the Western Cape are producing adequate numbers of new teachers with the requisite phase and curriculum specialisations and the requisite language/s of instruction. In order to report realistically on the profiles of new teachers coming into the system/workforce, the ESDA collected student data from the four Western Cape universities' four-year B Ed and PGCE (Post-graduate Certificate in Education) graduates from 2006 and 2007, and final (fourth) year students in 2008.<sup>22</sup>

#### **4.3.2.1 HEI databases**

For the past few years, CHEC had collected annual enrolments in education programmes from each CHEC institution for discussion with the WCED. This data had, however, not been verified, nor had graduate numbers been collected. The data did not 'drill' down to the level required by the ESDA. The information needed for the ESDA was how many prospective teachers are coming through the system, and what learning areas/subjects and levels they have been trained to teach.

Ideally the ESDA needed individual student level data, on graduating/final year education students, at each HEI regarding the qualification they have studied; the level of school specialisation; their major/method subject/s; their gender; race; age; nationality; home language (and the language of learning and teaching a student could offer); whether they had a bursary, etc.

Information initially provided by the universities did not quite meet the ESDA needs. On scrutinising the data, it was found that in some cases indication by subjects/courses meant that ESDA could not establish how many students there were per subject, because students were doing more than one subject/course. Institutions were consequently asked to provide, in list form, information for the years 2006, 2007 and 2008 on graduating students (excluding their names) by qualification and phase, and, if possible, to extract the information from the appropriate records system as a spreadsheet file (e.g. Excel), with columns headed:

- Number
- Gender
- Age
- Home language
- Method subject 1
- Method subject 2

---

<sup>22</sup> The PGCE follows an appropriate first degree (for example, BA/BSc). It is to be replaced by an Advanced Diploma in Education (ADE). Both the four-year B Ed and the PGCE are recognised at REQV 14 level.

- Method subject 3
- Whether they could teaching in Afrikaans, English or isiXhosa (yes/no).

The purpose behind obtaining this particular data was so that two-way tables could be created of the counts of students' specialisation subjects. These tables could then be partitioned into three tables of similar structure for each of the three main teaching languages (and for each year). The data requested was received from the four HEIs although details provided were not necessarily in the identical format.

#### **4.3.2.2 HEI Student Survey**

The HEI *Student Survey* was designed to augment the above supply data by collecting data not readily available from the HEIs. It was to be completed by all students in the final year of their initial teacher training (B Ed and PGCE students) in 2008, but not by in-service or qualified teachers who are upgrading or retraining (for example, NPDE or ACE students). Apparently because of the nature, diversity and timing of courses followed by the latter group of students, it is notoriously difficult for institutions to get information gathering forms (even registration forms) back from this group of students.

The *Student Survey 2008* was distributed in August to the four HEIs to administer through their own channels at times that they considered most appropriate. Surveys from a total of 656 students at all four HEIs had been completed and returned to the ESDA team for capture by 10 November 2008.

#### **4.3.3 Potentially available people not currently employed in the sector**

For the ESDA study a relevant section was extracted from a report (2008) prepared by Derek Yu on the labour market status of the graduates whose study field is education, training or development in the Western Cape. The report, which was received from Professor Servaas Van der Berg, Department of Economics, University of Stellenbosch, for incorporation into the ESDA report, uses the Labour Force Surveys (LFS) and census data as sources of potentially available people (for teacher supply) by identifying the number of individuals and unemployed people who studied education and/or had previous jobs in education but who are not currently employed in the sector.

### **4.4 Data processing**

#### **4.4.1 Educator Questionnaire**

The first level of processing of the EQs entailed checking whether there were any individuals who had completed questionnaires, who were not included in the sampling frame. Grade R-12 teachers at the schools were to be included in the sample as were teachers in SGB posts but teacher

assistants were not included in the brief for the research. We found that, at a few schools, teacher assistants had also completed questionnaires; these were removed from the data set. Data from a total of 4 545 Educator Questionnaires was used for the study.

A constraint that emerged through the data preparation process was that the ESDA data collection instruments were not suitable for use at all special schools. Two special schools formed part of the original sample, one in Eden and Central Karoo and the other in Metro East. We were unable to capture data from the special school in Eden and Central Karoo, mainly because of the way classes were structured at the school, and because the EQ had not been designed to cater for the skills-based curriculum that apparently existed at the school; teachers were not able to complete the section of the questionnaire which asked about the classes and grades they taught.

#### **4.4.1.1 Data validation and constraints**

For the qualifications validation process, the copies of teachers' qualifications, whenever teachers had made these available, were used to verify all available information on qualifications and subject specialisations provided by teachers in their questionnaires. This validation process was carried out by a team of five, who also indicated on the front of each completed questionnaire whether all (yes), some (partial), or no (no) qualifications were attached.

Of 4 545 completed questionnaires 3 623 (80%) teachers had attached copies of all relevant qualifications, another 157 (3%) had attached a copy of some but not all of their reported qualifications; and 765 teachers (17%) did not provide copies of any of their qualifications. Some teachers (mostly teachers who had obtained qualifications twenty or thirty or more years ago) had gone so far as attaching letters of apology and explanations such as stating that they had lost their documents.

Other limitations encountered in the validation process were:

- In many cases certificates did not provide the subjects that teachers had taken for the qualification. Although in some of these cases, teachers had had the foresight to attach copies of transcripts of the subjects they had taken.
- There is a more recent trend amongst some HEIs to issue certificates that do not indicate either the (school) level of professional teaching qualifications obtained or the subject specialisation on certificates (for example, simply indicating 'specialisation').

In conjunction with the validation process, each batch of questionnaires was checked (for example, to see that all fields had been correctly completed, etc.) and prepared for data capture.

#### **4.4.2 School and Student Surveys**

A constraint that emerged through the data preparation process was that the School Survey was not suitable for use at all special schools because of the way most of these schools structure their classes. Data were used from surveys at special schools where the instruments had proved suitable. A further constraint with regard to the bulk email and posted School Surveys was that the instrument had originally been designed to be administered directly by fieldworkers on school visits and had not been piloted for the purpose of indirect data collection.

A limitation regarding a question in the *Student Survey 2008* also emerged. A question asked whether students had a teaching post for 2009. A constraint was that when the Survey was administered to students, before the end of October 2008, it was too early for students to have been informed by the WCED as to whether applications for posts at WCED schools had been successful or not.

#### **4.5 Data capture, cleaning and verification**

The School Survey, Student Survey and Educator Questionnaire data were captured (after the validation process had been completed) on an Excel database. Captured data were then cleaned in preparation for the data verification process. Verification focused on checking that all data from the Educator Questionnaires on the grades, learning areas and subjects that teachers reported they were teaching in 2008 was correctly captured as this was the most complex section of the data capturing.

One of the difficulties with handwritten responses, as opposed to data collected electronically, is that respondents' writing is not always legible. Names and other information are sometimes illegible. This is particularly an issue in relation to keeping track of the identities of individual respondents. The data verifiers tried to control this by checking the names on teachers' certificates where these were available, although married women often have different surnames from those provided on their qualifications. It is also more difficult with paper-based instruments to ensure the accuracy of other forms of identification. For example, it is more difficult to control whether respondents are omitting numbers when providing identification such as their PERSAL numbers, SACE membership numbers or ID numbers, etc. Teachers are not always able to provide these numbers, either because they do not remember them or because, for example, they are in SGB posts and do not have PERSAL numbers. In some cases teachers chose not to provide these details. This had implications in terms of our ability to match, compare and triangulate ESDA data collected with existing WCED data using ID, PERSAL and/or SACE numbers etc.

Chapter 5 provides an account of the data analysis challenges and how these were addressed.



## **PART 2: DATA ANALYSIS AND RESEARCH FINDINGS**

Part 2 provides an account of data analysis processes and procedures, the challenges encountered (Chapter 5), and the research findings (Chapter 6, 7 and 8).

### **CHAPTER 5: ANALYSING THE DATA**

The following are the data sources for data analysis:

- Educator Questionnaire data on teachers at sample schools
- School Survey data from the sample schools and from public ordinary and special schools that responded to the survey
- Student Survey 2008 data on IPET graduate students at the four Western Cape Higher Education Institutions responsible for teacher education: UCT, US, UWC and CPUT.
- graduate/final year student teacher data for 2006, 2007 and 2008 provided by the four HEIs.
- report on the labour market status of the graduates whose study field is education, training or development in the Western Cape (Yu, 2008) which uses the LFS and census data as sources of potentially available people for teacher supply.

#### **5.1 Sample used for the analysis**

The ESDA study used Educator Questionnaire information provided by 4 545 teachers from the 151 schools sampled from Eden and Central Karoo and Metro East. The next section provides information on the schools in which these teachers were teaching; followed by a section providing details on the composition of the teacher sample.

##### **5.1.2 School sample**

Of the schools, 78 are located in a rural Education District, Eden and Central Karoo, and 73 are in an urban district, Metro East. Two special schools formed part of the original sample, one in Eden and Central Karoo and the other in Metro East. However, as explained in Chapter 4, the data from the special school in Eden and Central Karoo could not be used in the analysis, as teachers were unable to complete the section of the questionnaire which asked about the classes and grades they taught, because of differences in the way the special classes are structured at the school. As it happens, at one of the ordinary primary schools in the Eden and South Karoo Education District, fieldworkers found that the school had been split into two (a junior primary and a 'primary' school) both with their own principals. As they collected data at both schools, both sets of data have been included as two distinct schools in the analysis. Hence the number of Primary/

Intermediate schools in the Eden and Central Karoo sample increased from 51 to 52 and the overall sample of 78 for the District was maintained.

Table 5.1 below provides a breakdown of types of schools and the number of schools and school levels per Education District.

**Table 5.1: Sample school level**

	<b>Eden and Central Karoo</b>	<b>Metro East</b>	<b>Total</b>
Primary/Intermediate	52	40	92
Secondary	22	30	52
Combined	4	2	6
Special	0	1	1
<b>Total</b>	<b>78</b>	<b>73</b>	<b>151</b>

Table 5.2 shows the number of the 150 public ordinary schools in the sample that (according to WCED data provided) were established under the current (post-1994) WCED and the number that fell under different pre-1994 education departments, the ‘white’ Cape Education Department (CED); House of Representatives (HoR); Department of Education and Training (DET).<sup>23</sup>

**Table 5.2: Former education department of public ordinary school sample (n=151)**

<b>Ex-Dept</b>	<b>No. &amp; percentage of schools</b>
CED	29 (19%)
DET	39 (26%)
HoR	67 (44%)
WCED	16 (11%)

Table 5.3 shows the number of sample schools per poverty quintile in each of the two Education Districts (according to WCED data provided). A school’s quintile is determined by the relative poverty of the surrounding community. This is based on individual and household incomes from Statistics SA data. Quintile 5 schools are the least poor schools. In the Western Cape, quintile 1, 2 and 3 schools are non-fee paying schools.

**Table 5.3: School sample quintiles for Eden and Central Karoo and Metro East**

<b>Quintiles</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
Eden and Central Karoo	11	17	19	18	13	78
Metro East	0	7	29	4	33	73
<b>Total</b>	<b>11</b>	<b>24</b>	<b>48</b>	<b>22</b>	<b>46</b>	<b>151</b>

<sup>23</sup> Categories provided in the WCED database.

The majority of schools in the sample as a whole are quintile 3 (48), followed by quintile 5 (46), and then by quintile 2 (24). The majority of schools in the Eden and Central Karoo sample are quintile 3, followed by quintile 4, and then by quintile 2. The majority of schools in Metro East are quintile 5, followed by quintile 3, and then by quintile 2. Of the sample, 83 schools (55%) are quintile 1, 2 or 3 schools (non-fee paying).

In the School Survey, principals were asked to identify the main settlement type in which their school was located. Table 5.4 shows data based on principals' reports:

**Table 5.4: Principals' reports on school settlement type**

Settlement type	Number of schools
Deep rural area	2
Rural/farming area/village	27
Formal 'township' area	63
Informal/'squatter' settlement area	10
Low density suburban area	33
High density urban area (high rise buildings, flats)	8
Blank	1
<b>Total</b>	<b>144</b>

\* 7 School Surveys not completed<sup>24</sup>

Data suggest that the largest proportion (63) of sample schools is located in formal 'township' areas. The smallest proportion is located in deep rural areas.

### 5.1.3 Composition of the teacher sample

Table 5.5 reports the number of teachers who claimed (in the Educator Questionnaires) that they are WCED-paid, SGB-paid; paid by another special funder; or 'did not know'.

**Table 5.5: Number of WCED paid and privately funded teachers in sample**

WCED paid	4045
SGB paid	482
'Other special funder'	4
Don't know	8
Missing responses	6
<b>Total</b>	<b>4545</b>

Data indicate that 486 (11%) of the 4 545 teachers in the actual sample are privately-paid, whilst 4 045 (89%) are paid by the WCED.

<sup>24</sup> Seven of the school principals at the 151 sample schools did not complete the School Survey in spite of the school visits and numerous follow-up requests.

Table 5.6 in Appendix D provides information on the number of Educator Questionnaires obtained and used from each of the sample schools.

According to information available from school principals in the School Survey and data collection reports, there are 4 862 teachers employed (including SGB posts) across the 151 sample schools. Based on this information, in our estimation:

- Data were obtained through Educator Questionnaires from 92% of the possible sample population and used in data analysis, i.e. EQ data from only 8% (317) of the sampled teacher population were not available for the analysis.

Table 5.7 below shows that the sample comprises **2 027** teachers from the 78 schools in Eden and Central Karoo and **2 518** teachers from the 73 schools in the Metro East.

**Table 5.7: Number of WCED paid and privately funded teachers per Education District**

	<b>Eden &amp; Central Karoo</b>	<b>Metro East</b>
WCED paid	1799	2246
SGB paid	225	257
Other/Don't know/Missing response	3	15
<b>Total</b>	<b>2027</b>	<b>2518</b>

Based on information in the School Survey:

- data from EQs from 94% (2 027) of the possible sample population of teachers from Eden and South Karoo Education District were obtained and used for the analysis. EQ data from 6% (123) of the sample population from Eden and South Karoo were not available for the analysis.
- data from 93% (2 518) of the sample population of teachers from Metro East were obtained and used for the analysis. Data from 7% (194) of the sampled population from Metro East were not available for the analysis.

Tables 5.8-5.10 show the number of WCED and SGB teachers in the sample with permanent or temporary WCED-funded and privately-funded posts as reported in the Educator Questionnaire (where both sets of information, i.e. funded posts and permanent/temporary positions, were provided).

**Table 5.8: Number of teachers (for the sample as a whole) with permanent and temporary WCED and SGB posts**

Post funded	Permanent	Temporary	Don't know	Total
WCED	3434	581	14	4029
SGB	100	344	35	479
Other special funder	2	2	-	4
Don't know	2	3	3	8
<b>Total</b>	<b>3538</b>	<b>930</b>	<b>52</b>	<b>4250 *</b>

\* 25 missing from both sets

**Table 5.9: Eden and Central Karoo – Number of teachers in the sample with permanent and temporary WCED and SGB posts**

Post funded	Permanent	Temporary	Don't know	Total
WCED	1567	224	4	1795
SGB	31	172	21	224
Don't know		2		2
<b>Total</b>	<b>1598</b>	<b>398</b>	<b>25</b>	<b>2021 *</b>

\* 6 missing from both sets

**Table 5.10: Metro East – Number of teachers in the sample with permanent and temporary WCED and SGB posts**

Post funded	Permanent	Temporary	Don't know	Total
WCED	1867	357	10	2234
SGB	69	172	14	225
Other special funder	2	2		4
Don't know	2	1	3	6
<b>Total</b>	<b>1940</b>	<b>532</b>	<b>27</b>	<b>2499 *</b>

\*19 missing from both sets.

Table 5.11 indicates from the available data that Educator Questionnaires from 92% (2 425) of teachers at the 92 Primary and Intermediate sample schools were used for the analysis; 100% (73) of the teachers from the six Combined schools; and 94% (2 190) of the teachers from the 52 Secondary schools.

**Table 5.11: Number of sample teachers from Primary, Intermediate, Combined, Secondary schools and Special schools**

	Primary	Intermediate	Combined	Secondary	Special
WCED paid	1807	365	61	1783	29
SGB paid	228	15	11	222	6
<b>Total*</b>	<b>2044</b>	<b>381</b>	<b>73</b>	<b>2012</b>	<b>35</b>
Possible sample**	2624		73	2190	35

\* Total includes 'other special funder'; 'don't know'; and missing answers about who funds the post.

\*\* Based on information provided from school principals in the School Survey data.

Table 5.12 shows the number of teachers in the sample who are teaching in WCED (current Western Cape Department of Education); ex-CED (House of Assembly); ex-HoR (House of Representatives); ex-DET (Department of Education and Training) schools in each District.

**Table 5.12: Number of sample teachers in WCED; ex-CED; ex-HoR; ex-DET schools per District**

<b>Ex Dept</b>	<b>CED</b>	<b>DET</b>	<b>HoR</b>	<b>WCED</b>	<b>Total</b>
Eden and Central Karoo	440	312	1130	145	2027
Metro East	586	912	616	404	2518
<b>Total</b>	<b>1026</b>	<b>1224</b>	<b>1746</b>	<b>549</b>	<b>4545</b>

The largest proportion of teachers in the sample as a whole currently teach in ex-HoR schools, followed by teachers who teach in ex-DET schools, and then by teachers who teach in ex-CED schools. In Metro East, the largest proportion currently teach in ex-DET schools, whilst in Eden and Central Karoo, the largest proportion teach in ex-HoR schools.

Table 5.13 shows the number of teachers in the sample teaching in schools located within specific poverty quintiles in each District.

**Table 5.13: Number of teachers per quintile school in each Education District**

<b>Quintiles</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
Eden and Central Karoo	78	503	572	470	404	2027
Metro East		189	975	117	1237	2518
<b>Total</b>	<b>78</b>	<b>692</b>	<b>1547</b>	<b>587</b>	<b>1641</b>	<b>4545</b>

The largest proportion of the sample of teachers teach in quintile 5 schools, followed by teachers who teach in quintile 3 schools, and then by teachers who teach in quintile 2 schools. Although 11 of the schools sampled in Eden and Central Karoo are quintile 1 (refer Table 5.3), only 78 of the teachers teach at these schools, suggesting that the low quintile schools are smaller schools.

Table 5.14: In the EQ, teachers were asked to report on the language/s they speak most at home. Some teachers reported one main language, whilst others reported two or more. The table shows the number of teachers who reported speaking one or two of the three main languages in the Western Cape, at home.

**Table 5.14: Sample teachers' reports on language/s most spoken at home**

<b>Home language 1</b>	<b>Home language 2</b>				<b>Only one language spoken at home</b>	<b>Total</b>
	<b>English</b>	<b>Afrikaans</b>	<b>isiXhosa</b>	<b>Other</b>		
English		419	230	61	394	1055
Afrikaans	29		6	15	2168	2206
isiXhosa	15	4		24	1138	1178
Other				43	59	70
<b>Total</b>	<b>44</b>	<b>423</b>	<b>236</b>	<b>143</b>	<b>3759</b>	<b>4509</b>

Information from the EQs suggests that the largest proportion of teachers who speak only one language at home, speak Afrikaans, followed by isiXhosa and then English; 44 teachers said that

they speak English and one of the other two main languages at home; 423 said they speak Afrikaans and one of the other two main languages at home; 236 said they speak isiXhosa and one of the other main languages at home.

## 5.2 Analysis of Educator Questionnaire data

A major challenge related to the EQ data analysis was determining whether or not teachers were ‘adequately’ qualified in terms of *formal accreditation for the teaching of a learning area/subject in a particular phase/grade (i.e. specialisation in the subject, learning areas and or phases that they are expected to teach)*.

### 5.2.1 Qualifications

The standard means of determining whether teachers are adequately qualified in research in South Africa has been to evaluate teachers’ status in terms of their Relative Education Qualification Value (REQV) level as per Table 5.15. The table provides each level and indicates teachers’ qualification status for salary and other purposes in 2008:

**Table 5.15: REQV levels and status**

REQV LEVEL	STATUS
10=Matric, no training	Unqualified
11=Std 6,7,8,9+2 yrs training	Under-qualified
12=Matric+2 yrs training	Under-qualified
13=Matric+3 yrs training	Qualified but under-qualified for future requirements <sup>25</sup>
14=Matric+4 yrs training	Qualified
15=Matric+5 yrs training	Qualified
16=Matric+6 yrs training	Qualified
17=Matric+7 yrs training	Qualified

In terms of the Department of Education’s Norms and Standards for Educators (DoE, 2000a) the minimum qualification requirement for ‘qualified’ is REQV 13 level or a three-year post-school qualification. The definition of ‘under-qualified’ is REQV 12 or lower. The minimum requirement for registration with the professional teachers’ body, SACE, is a post-matric teacher education qualification of three years (M + 3) or REQV 13, whilst for registration for the pre-primary phase it is a two-year certificate in teacher education (M + 2) or REQV 12.

Although the ESDA Educator Questionnaire had asked teachers to provide their REQV level, we decided to compare the responses of WCED employed teachers with available PERSAL data with self-report information provided by teachers. We were not in the position to evaluate teachers’ REQV levels ourselves because confirming or evaluating a teacher’s REQV level is not a straightforward process but is fairly complex. As a teacher’s REQV level determines their salary

<sup>25</sup> The *National Policy Framework for Teacher Education* (DoE, 2006), states that in future requirements will be REQV level 14, that is, a) a four-year professional B Ed degree; b) a three-year junior degree + one-year post-graduate diploma, i.e. an Advanced Diploma in Education (PGCE/HDE) NQF level 7 (480 credits).

level, we assumed that PERSAL 2008 data were a fairly reliable source for the purpose of identifying un- or under-qualified teachers (teachers with less than REQV 13). To make the comparison it was necessary to match our electronically captured data with that of the PERSAL electronic database. Where we were able to, we compared the REQV levels provided by teachers in the EQs with available PERSAL REQV data (see Table 6.5 in Chapter 6).<sup>26</sup>

Whilst a teacher's REQV is useful for the purpose of determining whether the teacher has formal accredited or recognised qualifications and is not un- or under-qualified in terms of the minimum qualification currently required (i.e. REQV 13 level), the REQV level on its own does not indicate whether or not teachers are 'adequately qualified' *for the teaching of a learning area/subject in a particular phase/grade (i.e. specialisation in the learning areas, subject and or phases that they are expected to teach)*. One of the main foci of the data analysis for the ESDA was the actual match between teachers' subject specialisation/s and the school level they were trained to teach according to their qualifications and their current teaching responsibilities.

### **5.2.2 Matching subject specialisations and level with teaching assignment**

We were specifically interested in which learning areas/subjects teachers are most commonly assigned to teach where they are teaching out of their field. One of the main difficulties in analysing this situation is that, with the curriculum changes that have taken place, the subject specialisations that teachers obtained (when they were trained for a different system) don't easily fit the current school curriculum. A related difficulty is matching the level of schooling for which teachers had been trained in their professional qualifications, to the new levels. Most of the current cohort of teachers were trained as pre-primary (Grade R and below), junior primary (Grade 1-Std 1/Grades 1-3), senior primary (Std 2-5/Grades 4-7), lower secondary (Std 6-8/Grades 8-10), or secondary teachers (Std 6-10/Grades 8-12) rather than for Foundation Phase (Grades R-3), Intermediate Phase (Grades 4-6), Senior Phase (Grades 7-9), or Further Education and Training (FET) (Grades 10-12) levels.

Because of these complexities, as a first layer of data analysis, the team that validated teacher's qualifications also examined and assessed the degree of 'match' between each teacher's qualifications and the grades and learning areas/subjects teachers reported that they were teaching in 2008. Team members were simply asked '*to identify whether or not a particular teacher was qualified to teach the subjects and levels that they were teaching*'. The process involved manually assessing information provided in each EQ and judging the extent to which individual teachers were teaching in their field of expertise. This judgement entailed taking into account both the

---

<sup>26</sup> Had we been in the position to conduct an online survey using WCED systems, responses to these 'identifier' questions in the EQ could have been pre-populated using existing PERSAL and other reliable WCED data.

school level (for example, junior primary; senior primary; Foundation Phase; secondary, etc.) of teachers' professional qualifications, as well as their subject specialisations (for example, in their degrees) and the grades and learning areas or subjects teachers were teaching. Each 'assessor' then wrote a brief comment justifying his/her decision.

The members of the team making these judgements comprised the ESDA project researcher (who holds a PhD in Education); the ESDA research assistant (who holds a Masters degree and has extensive experience in school textbook publishing and knowledge of the new curriculum); two retired school principals (one primary and one high); and an ex-high school teacher.

This 'one-by-one' individualised process using the teacher as the unit of analysis proved to be time consuming but informative and a useful preparation for the analysis of the electronically captured data. Various complexities, nuances, variations and subtleties in the data emerged together with other issues which would not necessarily have become apparent had the process begun by conducting a more quantitative analysis of electronically captured data. One of the issues arising was that, in the absence of/difficulty of setting specific criteria, different members of the team developed slightly different criteria for assessing the degree of 'match'. Many of the queries around 'matching' teachers at the different levels arose because most of the current cohort of teachers was not trained for the new system and the changed curriculum.

For example, some of the learning areas that are taught in the Intermediate and Senior Phase now integrate one or more of the subjects or areas that teachers studied in the past, into one learning area. Life Orientation covers Physical Education, Health Education, HIV/Aids Education, Religion Studies, and Career Guidance. Social Sciences incorporates History and Geography. Economic and Management Sciences incorporates Business Studies, Economics, Entrepreneurship and some Accountancy. Arts and Culture includes Art, Music, Dance and Drama. Teachers have usually covered some but rarely all these subjects or areas in their qualifications. At the FET level, a number of 'newer' more work-related subjects such as Agricultural Management Practices, Tourism, Hospitality Studies, Engineering Graphics and Design, Information Technology, Computer Applications Technology and Civil, Electrical and Mechanical Technology have also been introduced.

A few examples of the questions that arose out of the 'paper-based' matching process at different levels, is:

- a teacher who has a degree or (e.g. technical) diploma in the FET subjects that s/he is teaching but does not have a professional teaching qualification (i.e. is academically qualified but professionally unqualified) a match for teaching subjects at that level?

- an under-qualified teacher (a teacher with less than M + 3, for example, a teacher with an outdated two-year teaching certificate/REQV 11 or 12), who is nevertheless trained to teach the particular level or subject they are teaching, a match or ‘no match’?
- a Grade R teacher with one or more Early Childhood Development or Educare qualifications which are not recognised by the DoE for salary purposes (REQV level 10) a match, or not?
- a junior primary trained teacher teaching Grade 4, a match or not?
- a senior primary trained teacher who has no training in literacy teaching and who teaches a grade at Foundation Phase level a match or not?
- a senior primary trained teacher who specialised in two or three subjects such as Physical Education, but has no Mathematics courses indicated in his/her qualification/s, a match for teaching multigrade Intermediate Phase classes (in smaller schools)?
- a teacher who is qualified to teach one or some of the learning areas or FET subject s/he teaches but not others a match for the post they hold?
- a senior primary teacher trained in woodwork, handwork or needlework a match for teaching Senior Phase Technology?
- a teacher whose first teaching certificate was for junior primary teaching but whose third year (Diploma in Education) upgrade was for senior primary teaching, qualified to teacher Grades 6 and 7? What about Grades 8 and 9?
- an Intermediate or Senior Phase teacher who has Accountancy but not other dimensions of Economic and Management Science a match for teaching EMS?
- an Intermediate or Senior Phase teacher who has Music as a subject a match for Arts and Culture?
- a teacher who has Biblical Studies a match for teaching Life Orientation at Senior Phase and FET level?
- a teacher who has Geography but not History a match for teaching Social Sciences at the Senior Phase level?
- a teacher who has Geography (or History, or Business Studies) a match for teaching Tourism at the FET level?
- a teacher who has one year of Mathematics or Science in a re-training ACE but no Mathematics or Science specialisation in his/her initial three- or four-year teacher training, a match for teaching Grade 12 Mathematics or Physics?
- a teacher who does not have a remedial or special needs qualification a match for teaching at a special school?
- a teacher with a ‘general’ Technology specialisation a match for teaching Mechanical Technology at FET level?

- a teacher who has Life Sciences or Biology a match for Agricultural Science and vice versa?
- a teacher who has Economics a match for Business Studies?
- a person who has short computer (informal) courses but no professional teaching qualification a match for teaching FET level Information Technology of Computer Applications Technology (CAT)?
- someone who has typing a match for teaching CAT?

Four basic categories were used for this initial analysis for classifying the extent to which each teacher was qualified to teach the subjects and levels that they were teaching:

- A **‘match’** is where a teacher only teaches learning areas/subjects for which s/he is qualified at an appropriate level. At the Intermediate, Senior and Further Education and Training level, the team looked for evidence that a teacher had subject/s or any related relevant subjects in his/her qualifications at an appropriate level for the grade/phase s/he is teaching, and is therefore *teaching within his/her field of expertise*.<sup>27</sup> For example, a teacher who has a BA in Geography and 1<sup>st</sup> year Political Studies is a match for teaching Social Science, or one who has a B Com with Accountancy but not the other dimensions of Economic and Management Science. Essentially the criteria for a ‘match’ included a teacher teaching any school level other than Foundation Phase who is academically qualified for teaching the learning areas/subjects and level s/he teaches even if s/he is professionally unqualified.<sup>28</sup> At the Foundation Phase level, the team focused on the level for which teachers had been trained (i.e. trained in literacy teaching, etc.)
- **‘No match’** where there is no evidence that a teacher had subject/s in his/her qualifications at an appropriate level for the grade/phase that s/he teaching, and is therefore teaching *out-of-field* of his /her training. This ‘no match’ includes a primary school trained teacher teaching at the FET level and an Intermediate, a Senior or FET trained teacher who has no training in literacy teaching but teaches Foundation Phase grades. Essentially a teacher was assessed as ‘no match’ where the teacher is not qualified to teach any of the learning areas/subjects at the level s/he is teaching.
- **‘Can’t match’** when insufficient information is provided in the EQ either in regard to the subjects and grades the teacher is teaching, or in regard to his/her qualifications details.
- A **‘partial match’** which implied that the teacher is partially within his/her field of expertise. This category includes those teachers who are teaching some learning areas/subjects at levels for which they are qualified but teach other learning areas/subjects for

---

<sup>27</sup> Principal, deputies or head of department who did not teach any classes were classified as a ‘match’.

<sup>28</sup> Although this point is debatable, and professional qualifications are important, the rationale is that what matters most at these levels is that teachers have the necessary disciplinary background.

which they are not qualified. This included an under-qualified teacher with an outdated two-year teaching certificate (REQV 11 or 12) who was trained to teach the particular level or subject they are teaching; a Grade R teacher with Early Childhood Development or Educare qualifications that are not recognised by the DoE.

What this first ‘paper-based’ round of analysis demonstrated was that using the learning area/subject and grade level as the unit of analysis would be constructive for the analysis of the electronically captured data at the General Education and Training (GET) and FET levels. In this way we could establish in which learning areas/subjects and grades/phases there were shortages, and which learning areas/subjects are most commonly taught by teachers who are teaching out-of-field or area of specialisation or level of professional teaching qualification. We could also establish what subject specialisations teachers, deemed to be teaching within their field of expertise, most commonly have. For example, the extent to which teachers with ‘appropriate’ subject qualification to teach Arts and Culture tend to have Music, or Art, or Dance, or Drama in their qualifications.

The ESDA project researcher asked the WCED liaison official to establish whether the WCED or the DoE had developed any up-to-date criteria with specific requirements, particularly for the ‘integrated’ learning areas and ‘new’ more work-related subjects, that could be used for the ‘subject and level specialisation analysis’, other than those contained in the *Criteria for the Recognition and Evaluation of Qualifications for Employment in Education* (DoE, 2000b) and the Overview documents of the *National Curriculum Statement Grades R-9 (Schools)* (DoE, 2002) and *Grades 10-12 (General)* (DoE, 2003) which briefly defined/discussed each learning area/subject. Specifically we needed to know whether there were criteria for ‘acceptable subjects’ that teachers should have for each learning area or subject for each school phase. In the absence of specific requirements from the Education Department, the task of determining criteria for determining whether or not, or the extent to which, teachers’ school levels and subject specialisations in their qualifications were matched to the areas and/or subjects they are teaching, would have to be devolved to the ESDA research team.

As it seemed that specific criteria were not readily available, a reference group was set up to consider the issue in preparation for an analysis of the electronically captured data.

#### **5.2.2.1 Criteria for ‘acceptable subjects’ for each learning area or subject**

Earlier on in the research process, the EDSA team had been concerned about what framework would be used once data had been captured electronically to check whether codes from teachers’

subject specialisation in their qualifications (as provided in the EQs) were linked to the learning areas and/or FET subjects they currently teach.

In the initial interactions with the DoE initiative, the ESDA project researcher had communicated with Tessa Welch at SAIDE (who was involved in designing the DoE teacher questionnaire), regarding the clustering and coding of subject specialisations and aligning them with the current school curriculum requirements. Prior to seeing the subject list the ESDA was developing, SAIDE had begun drafting a framework for coding teaching subjects under broad categories.<sup>29</sup> At GET level, the idea was to insert codes for learning areas as a whole and for constituent subject groupings within each learning area so that subjects would be clustered together under broader categories rather than identified individually. The following is an extract for Life Orientation from the framework illustrating this approach:

1. Life Orientation	Human rights education; democracy studies; citizenship studies	Religion Studies	Physical Education	Health Education	Guidance, Counselling, Psychology	Other
---------------------	--	------------------	--------------------	------------------	-----------------------------------	-------

SAIDE was also trying to develop a similar code list for subjects for FET teachers. The following is an extract from the FET, which was in a formative stage at that point:

Code	Official subject	Examples of related subjects
	Accounting	<b>Financial accountancy, Bookkeeping</b>
	Agricultural Management Practices	<b>Animal Husbandry, Field husbandry, Pasture Science, Pasture Management, Animal Production, Plant Production</b>

Using this idea of working within the framework of the GET learning areas (plus a few other strands, e.g. library, Early Childhood Development (ECD), the ESDA team decided to cluster subjects (specialisations) from the list of subjects already compiled for Key C of the EQ into fields within each learning area, for example, Technology. The intention of this was to provide a tool for the ‘matching’ process. The idea was to try to prepare an analytical framework for identifying whether codes from teachers' subject specialisations in their qualifications (as provided on the EQ) were linked to the areas and/or subjects they currently teach.

Two frameworks were developed: one for GET learning areas and the other for FET subjects. The frameworks took into account the findings on this aspect of the team of five people who conducted the first round of ‘manual’ data analysis. Cognisance was also taken of the challenges facing schools and the Education Department in allocating and timetabling existing teaching staff at schools with subject specialisations obtained under a different system into new areas of the

<sup>29</sup> Inserting subjects into a learning areas/subject fields needed to happen after the compilation of an entire subject list.

school curriculum. The decision was thus to include a fairly comprehensive range of ‘specialisations’ and related subjects for each learning area or FET subject. For example, for Social Sciences we listed Human and Social Sciences and clustered the following subjects under five main fields (indicated in bold font):

<b>History</b> African history African studies Ancient history/culture Archaeology Classical studies/classical culture Economic history Historical studies Political science Political studies	<b>Cultural Studies</b> Anthropology Ethnology Social anthropology	<b>Geography</b> Astronomy Development studies Earth Sciences Earth-space science Geographical science Geographical studies Oceanography	<b>Environmental Education</b> Biodiversity Ecology Environmental science Environmental studies Marine ecology	<b>Human Rights Education</b> Anti-racism education Citizenship and democracy studies Civics/civic responsibility Diversity studies Values and human rights
---	---	---	---	--

The following is an example of subjects listed for one of the newer more work-related FET subjects, Hospitality Studies:

- Hospitality Studies**
- Hospitality generics
- Hotel and tourism management
- Hotel keeping and catering
- Restaurant studies
- Hotel law
- Consumer Studies**
- Food Technology**
- Agricultural food technology
- Cookery
- Cookery and nutrition
- Culinary skills
- Dietetics
- Domestic Science
- Food and nutrition
- Food preparation
- Food science
- Housekeeping and food service management
- Nutrition
- Science of nutrition

The GET learning area and FET subject frameworks that were developed and applied in the analysis for the ESDA are included in Appendix E and F. Codes for each of the subjects clustered on the frameworks were matched with codes used on Key C: Subject specialisations, of the EQ.

### 5.2.2.2 Criteria for ‘acceptable’ school levels for each phase

The EQ asked teachers to provide the main school level of their professional teaching qualifications. It provided the following response options for teachers:

- 01= Pre-primary/Early Childhood Development (ECD).
- 02= Junior Primary/Foundation Phase (including Reception Year/Grade R)/Lower Primary.
- 03= Senior Primary/Intermediate Phase/Intermediate and Senior Phase.
- 04= Primary (in general).
- 05= Lower Secondary/Senior Phase.
- 06= Secondary/Upper Secondary/Senior phase and/or Further Education Training.
- 07= Multigrade.
- 08= Tertiary Level (Post-Secondary school) or Adult Education.

The following criteria for ‘acceptable’ levels of professional teaching qualifications were applied for the various grades in the analysis:

**Table 5.16: Levels of professional teaching qualifications applicable for grades**

Grade	Code in the EQ	Categories of qualification school levels
Grades R	01	Pre-primary/Early Childhood Development (ECD).
	02	Junior Primary/Foundation Phase (including Reception Year/Grade R)/Lower Primary.
Grade 1-3	02	Junior Primary/Foundation Phase (including Reception Year/Grade R)/Lower Primary.
Grade 4	02	Junior Primary/Foundation Phase (including Reception Year/Grade R)/Lower Primary.
	03	Senior Primary/Intermediate Phase/Intermediate and Senior Phase.
	04	Primary (in general).
Grade 5-6	03	Senior Primary/Intermediate Phase/Intermediate and Senior Phase.
	04	Primary (in general).
	05	Lower Secondary/Senior Phase.
Grade 7-8	03	Senior Primary/Intermediate Phase/Intermediate and Senior Phase.
	04	Primary (in general).
	05	Lower Secondary/Senior Phase.
	06	Secondary/Upper Secondary/Senior phase and/or Further Education Training.
Grade 9	03	Senior Primary/Intermediate Phase/Intermediate and Senior Phase.
	05	Lower Secondary/Senior Phase.
	06	Secondary/Upper Secondary/Senior phase and/or Further Education Training.
Grade 10-12	06	Secondary/Upper Secondary/Senior phase and/or Further Education Training.

Electronic data processing for **Grades 5-12** entailed searching for the relevant codes for each of the subjects and grade levels. **Grade 4** was omitted in the analysis as teachers in some schools are class teachers who teach all learning areas whilst others teach only specific learning areas and this contrast made the analysis too complicated. Nevertheless, data on the other two grades for the Intermediate Phase provide a good indication of learning areas and grades/phases where there are shortages or which learning areas are most commonly taught by teachers who are teaching out of their field or area of specialisation or level of professional teaching qualification for the phase.

Excel was used to conduct this dimension of the analysis. The first level of analysis for Grades 5-12 used the analytical frameworks for GET learning areas and for FET subjects (Appendix E and F) that had been developed for identifying whether codes from teachers' subject specialisations in their qualifications were linked to the learning areas and/or subjects they currently teach as criteria.

The second level of analysis for Grade 5-12 applied the criteria for subject qualifications as well as for the school levels of professional teaching qualification (Table 5.16 in 5.2.2.2). This was to identify whether both the school level/s of a class teacher's professional teaching qualifications and his/her subject specialisations were linked to the grade level learning areas/subjects s/he currently teaches.

A further level of analysis of the *FET* level (Grade 10-12) data involved analysing data on the extent to which core FET subjects were taught by teachers *with a first general degree*, and the extent to which they were taught by teachers with a first general degree *as well as a professional qualification* for teaching at the *secondary school level*. Specifically, the analysis focused on the count of FET teachers in the *quintile 5* schools relative to the count in *non-quintile 5* schools (i.e. quintiles 1-4 schools combined into one group) for the following subjects:

- Afrikaans, English, isiXhosa
- Geography
- History
- Life Sciences
- Mathematical Literacy
- Mathematics
- Physical Sciences.

Analysis for **Foundation Phase** (Grades R-3) took into account only the level of professional teaching qualification (refer table 5.16 in 5.2.2.2) as Foundation Phase teachers are class teachers

and teach all three learning programmes (Literacy, Numeracy and Life Skills). The priority concern for this phase is that teachers are trained at the appropriate school level for teaching reading, writing and basic numeracy/mathematics. Thus at this school phase level, the grade level class was the unit of analysis.

### 5.3 Analysis of School Survey data

Data from 497 School Surveys received from public high and primary schools via post and fax were analysed together with the data from 144 School Surveys collected directly via the visits to the 151 sample schools. Ultimately, data from School Surveys from 641 schools (42%) out of a possible total of approximately 1 517 Western Cape public ordinary and special schools were used in the analysis.

In the School Survey, principals were asked to identify the main settlement type in which their school was located. Table 5.17 shows data based on principals' reports from the 641 schools:

**Table 5.17: Principals' reports on school settlement type**

Settlement type	Number of schools
Deep rural area	22
Rural/farming area/village	263
Formal 'township' area	120
Informal/'squatter' settlement area	16
Low density suburban area	155
High density urban area (high rise buildings, flats)	54
Blank	11
<b>Total</b>	<b>641</b>

Data suggest that the largest proportion of the 641 schools is located in rural/farming areas/villages (263). Of the schools 174 are located in high density urban or formal 'township' areas. The smallest proportions are located in informal/'squatter' settlement areas and deep rural areas.

### 5.4 Analysis of Student Survey data

The Student Survey data were analysed for IPET (B Ed and PGCE) 2008 final year students at the four Western Cape Higher Education Institutions (HEIs) responsible for teacher education. Table 5.18 provides the number of surveys analysed from each HEI.

**Table 5.18: Number of Student Surveys for analysis**

CPUT	UWC	Stellenbosch	UCT	Total
344	63	192	57	<b>656</b>

This supply dimension also includes an analysis of the additional Excel data on 2 736 education graduate/final year students received from the four HEIs for 2006, 2007 and 2008 on the two main categories of IPET students, the B Ed and PGCE students. A constraint is that the count of students includes 88 students from the Northern Institute for Higher Education (NIHE) in the Northern Cape. The University of the Western Cape acts as an accrediting institution for the NIHE and was not able to separate the details of NIHE students from the details of UWC students. The supply dimension is reported on in Chapter 8.

Chapter 6 discusses findings on the composition of the current teaching stock.

## CHAPTER 6: THE CURRENT TEACHING STOCK

According to the teacher supply and demand model outlined in the literature review, the following information regarding the *supply* of teachers is ‘ideally required’ over several years for an audit in the Western Cape:

### 1. The current teaching stock in schools:

- the number of teachers teaching in the Western Cape by REQV level, age, grade/phase, rank, gender and years of experience
- number and percentage of teachers teaching subjects in which they have a major or minor as opposed to ‘out-of-field’ teaching
- type of teacher training institution attended
- new appointments as opposed to experienced teachers dropping back into the system
- retention
- the number and proportion of teachers who are in permanent as opposed to temporary posts
- the number and percentage of SGB as opposed to state posts
- home language and teaching language
- extent of training received in new curriculum
- upgrading courses attended
- learner/teacher ratios
- HIV/AIDS prevalence.

### 2. Teacher training information:

- number of Senior Certificate graduates and number and percentage who go into teacher training
- number of student teachers by year of training, phase and major/minor subject field
- number of student teachers enrolled for initial training as opposed to upgrading
- graduation rates
- number and percentage of graduates who go into teaching
- bursaries available for teacher training
- socioeconomic variables (teacher salaries relative to other professions; economic growth vs. recession).

### 3. Potential teaching stock:

- number of teachers currently not working as teachers
- number of teachers not working at all
- number of foreign teachers presently teaching in the Western Cape.

4. **Qualitative** information on:

- results of Grades 3 and 6 assessments and Grades 9 and 12 examination results
- average age of learners in highest grade; repetition and dropout data.

**The review identified the following demand dimensions of information as ‘ideally required’ for a Western Cape teacher supply and demand study:**

1. Teacher information over several years:

- attrition through natural causes, HIV/AIDS and other reasons
- attrition by rank, age, subject, years of experience, qualification level
- vacancies and difficult to fill posts by subject and location
- present demand by phase, subject/learning area, language medium, learners with special needs
- learner/teacher ratios
- age of teachers
- teacher workload
- ‘out-of-field’ teaching.

2. Learner enrolment trends over several years:

- school age population by age
- enrolment by grade/phase
- home language
- throughput rates
- gross and net enrolment rates.

The primary focus of this chapter is on the cohort of teachers who currently hold positions in WCED schools. Although the focus is on teachers who are permanently on the WCED payroll, available data on teachers in SGB posts, temporary and substitution posts have also been included in the analysis of the ESDA sample of WCED schools. It is also important to bear in mind, when reading the findings presented, that the ESDA study collected data on a sample of WCED public schools in two Education Districts rather than on the whole population. The findings that follow are more indicative than representative.

### **6.1 Composition of the current teaching stock**

Section 5.1 in Chapter 5 provides details on the sample of teachers and the schools in which they are teaching. Tables 6.1- 6.3 below provide an overview of the positions and posts held by the ESDA sample of teachers as a whole, and then separately for the two Education Districts. Specifically, the tables show whether teachers reported (in the Educator Questionnaires) that their

posts in 2008 were permanent or temporary, how their posts were funded (e.g. WCED or SGB), and what their main positions were at the school.

**Table 6.1: Positions and posts held by sample teachers**

Perm/ Temp Type	Post funded	Main position at the school							Total
		Principal	Deputy principal	Senior Ed/ HoD	Classroom teacher	Remedial/ special needs	Other	Missing	
Permanent	WCED	117	181	1048	2012	66	7	3	3434
	SGB			6	83	2	9		100
	Other spec funder			1	1				2
	Don't know				2				2
<b>Total permanent</b>		<b>117</b>	<b>181</b>	<b>1055</b>	<b>2098</b>	<b>68</b>	<b>16</b>	<b>3</b>	<b>3538</b>
Temp	WCED	2		13	551	12	1	2	581
	SGB	1		8	305	16	14		344
	Other spec funder			1	1				2
	Don't know				3				3
<b>Total temporary</b>		<b>3</b>		<b>21</b>	<b>860</b>	<b>28</b>	<b>16</b>	<b>2</b>	<b>930</b>
Don't know*	WCED	1		1	11	1	1		15
	SGB				37				37
	Don't know				1			2	3
<b>Total don't know</b>		<b>1</b>		<b>1</b>	<b>49</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>55</b>
Missing	WCED	1		3	8	1		2	15
	SGB				1				1
<b>Total missing</b>		<b>1</b>		<b>3</b>	<b>9</b>	<b>1</b>		<b>2</b>	<b>16</b>
<b>Grand total</b>		<b>122</b>	<b>181</b>	<b>1080</b>	<b>3016</b>	<b>98</b>	<b>33</b>	<b>9</b>	<b>4539**</b>

\*These teachers indicated that they 'did not know' whether their posts were permanent or temporary.

\*\*6 missing information.

Data in the Table 6.1 show that:

- 3 434 (75%) of the sample teachers said they had permanent tenure in WCED posts and 581 (13%) said they were in temporary WCED posts in 2008.
- A total of 930 (20%) teachers (including privately-paid teachers) said they did not have permanent tenure and held temporary posts.

**Table 6.2: Eden and East Karoo – Positions and posts held by the sample teachers**

		Main position at the school							
Perm/ Temp Type	Post funded	Principal	Deputy principal	Senior Ed/ HoD	Classroom teacher	Remedial/ special needs	Other	Missing	Total
Permanent	WCED	71	81	509	880	25	1		1567
	SGB			1	28		2		31
<b>Total permanent</b>		<b>71</b>	<b>81</b>	<b>510</b>	<b>908</b>	<b>25</b>	<b>3</b>		<b>1598</b>
Temp	WCED	1		2	212	9			224
	SGB			4	158	6	4		172
	Don't know				2				2
<b>Total temporary</b>		<b>1</b>		<b>6</b>	<b>372</b>	<b>15</b>	<b>4</b>		<b>398</b>
Don't know	WCED			1	3	1			5
	SGB				22				22
<b>Total don't know</b>				<b>1</b>	<b>25</b>	<b>1</b>			<b>27</b>
Missing	WCED			1	1			1	3
<b>Total missing</b>				<b>1</b>	<b>1</b>			<b>1</b>	<b>3</b>
<b>Grand total</b>		<b>72</b>	<b>81</b>	<b>518</b>	<b>1306</b>	<b>41</b>	<b>7</b>	<b>1</b>	<b>2026*</b>

\*1 missing information

Data in the Table 6.2 show that:

- 1 567 (77%) of the sample of teachers in Eden and Central Karoo said they had permanent tenure in WCED posts and 224 (11%) were in temporary WCED posts.
- A total of 398 (20%) teachers (including privately-paid teachers) said they did not have permanent tenure and held temporary posts.

**Table 6.3: Metro East – Positions and posts held by the sample teachers**

Perm/ Temp Type	Post funded	Main position at the school							Total
		Principal	Deputy principal	Senior Ed/ HoD	Classroom teacher	Remedial/ special needs	Other	Missing	
Permanent	WCED	46	100	539	1132	41	6	3	1867
	SGB			5	55	2	7		69
	Other funder			1	1				2
	Don't know				2				2
<b>Total permanent</b>		<b>46</b>	<b>100</b>	<b>545</b>	<b>1190</b>	<b>43</b>	<b>13</b>	<b>3</b>	<b>1940</b>
Temp	WCED	1		11	339	3	1	2	357
	SGB	1		4	147	10	10		172
	Other funder				1		1		2
	Don't know				1				1
<b>Total temporary</b>		<b>2</b>		<b>15</b>	<b>488</b>	<b>13</b>	<b>12</b>	<b>2</b>	<b>532</b>
Don't know*	WCED	1			8		1		10
	SGB				15				15
	Don't know				1			2	3
<b>Total don't know</b>		<b>1</b>			<b>24</b>		<b>1</b>	<b>2</b>	<b>28</b>
Missing	WCED	1		2	7	1		1	12
	SGB				1				1
<b>Total missing</b>		<b>1</b>		<b>2</b>	<b>8</b>	<b>1</b>		<b>1</b>	<b>13</b>
<b>Grand total</b>		<b>50</b>	<b>100</b>	<b>562</b>	<b>1710</b>	<b>57</b>	<b>26</b>	<b>8</b>	<b>2513*</b>

\*5 missing information

Data in the Table 6.3 show that:

- 1 867 (74%) of the sample of teachers in Metro East said they had permanent tenure in WCED posts and 357 (14%) were in temporary WCED posts.
- A total of 532 (21%) teachers (including privately-paid teachers) said they did not have permanent tenure and held temporary posts.

## 6.2 REQV levels of current teaching stock

As discussed more fully in Chapter 5, a major challenge related to the EQ data analysis is determining whether or not teachers already employed in public schools are 'adequately qualified' in terms of *formal accreditation for the teaching of a learning area/subject in a particular phase/grade (i.e. specialisation in the subject, learning areas and or phases that they are expected to teach)*. The standard way of research in South Africa to date has been to determine whether teachers are adequately qualified by evaluating teachers' status in terms of

their Relative Education Qualification Value (REQV) level. Chapter 5, section 5.2.1 provides data on teachers' REQV levels.

According to *Norms and Standards for Educators* (DoE, 2000a) the **current** minimum qualification requirement for 'qualified' is REQV 13 level or a three-year post-school qualification (M + 3). The current definition of 'underqualified' is REQV 12 or lower. However, in future the requirement will be REQV level 14, that is, M + 4 and teachers at REQV 13 will also be evaluated as 'underqualified'.

The *Report on Research into Teacher Upgrading* (SAIDE, 2008) used information from PERSAL 2008 to glean information on the number of teachers by REQV level per province. The following are the figures provided for the Western Cape:

**Table 6.4: Number of Educators by REQV for Western Cape (PERSAL)**

REQV				Total	REQV	Totals
10 Matric, no training	11 Std 6,7,8,9+2 yrs training	12 Matric+2 yrs training	13 Matric+3 yrs training		14 + 14=Matric+4 or more yrs training	
239	369	1311	8326	<b>10245</b>	20395	<b>30640</b>

Source: Report on Research into Teacher Upgrading (SAIDE, 2008) p50.

According to this PERSAL data:

- There are 30 640 WCED employed teachers in the Province
- 239 of these teachers are *unqualified* at REQV 10. 1 680 of the teachers are *underqualified for current requirements* at REQV 11 or 12. This summary suggests that 5% of the teachers employed are currently un- or underqualified.
- the majority of teachers (20 395) are REQV 14+ *qualified for current requirements*.
- 8 326 teachers (27%) are *qualified for current requirements (M + 3) but under-qualified for future requirements*.
- 20 395 of the teachers (67%) are *qualified for future requirements (M + 4 or more)*.
- Given the *future requirement* of M + 4, a total of 10 245 teachers are *un- or underqualified*.

Table 6.5 presents levels for the ESDA sample of teachers. This table provides a two-way classification of ESDA sample teachers REQV numbers as reported by teachers in the EQs, and the number of teachers at each REQV level according to PERSAL data where it was possible to match the two sets, using the PERSAL numbers provided by teachers.

**Table 6.5: REQV levels as reported by teachers in the Educator Questionnaire and as per PERSAL**

REQV	AS PER EQ									
PERSAL	10	11	12	13	14	15	16	17	Don't know	Total
10		1	1	5	6	1			1	15
11		30	3						0	33
12	1	9	74	18	1				1	104
13		5	7	923	81	8	3	2	8	1037
14	19	33	44	277	1973	193	49	38	26	2652
15			1	10	51	320	57	23	12	474
16				1	9	26	83	41	2	162
17						2	4	11	0	17
Not Available	1	2	1	11	15	3	1	1	6	41
<b>Total</b>	<b>21</b>	<b>80</b>	<b>131</b>	<b>1245</b>	<b>2136</b>	<b>553</b>	<b>197</b>	<b>116</b>	<b>56</b>	<b>4535*</b>

\* 10 teachers did not provide REQV levels in the EQs.

There are a number of reasons why the comparison of data in Table 6.5 shows some discrepancies between the apparent PERSAL and the EQ data. Some teachers may have provided incorrect REQV information in the EQs. Information from SGB/privately paid teachers who entered their REQV level on the EQ (possibly based on previous WCED posts held) has been included even though they are not currently being paid by the Department. Our EQ data included teachers in temporary/substitution posts. Nevertheless, data provided on Table 6.5 indicate that:

- there are 15-21 REQV 10 level teachers (of 4 535); 33-80 REQV 11 teachers; 104-131 REQV 12 teachers. This appears to confirm PERSAL data provided in Table 6.4 showing that about 5% of Western Cape teachers are *unqualified or under-qualified for current requirements* (M + 1/2).
- there are between 1 037 and 1 245 REQV 13 teachers (M + 3). This also appears to confirm PERSAL data provided in Table 6.4 showing that just under a third of teachers are *qualified for current requirements (M + 3) but under-qualified for future requirements*.
- There are 2 136-2 652 REQV 14 teachers (M + 4); 474-553 REQV 15 teachers (M + 5); 162-197 REQV 16 (M + 6); 17-116 REQV 17 teachers (M + 7). Although a constraint in terms of PERSAL data is that at the point when higher qualifications are no longer linked to salaries, records on new qualifications obtained are not always up-dated, this still appears to confirm Table 6.4 figures showing that at least 66% of the teachers employed in WCED schools are *qualified for future requirements* (M + 4 or more).

Table 6.6 and 6.7 show both sets of REQV for the ESDA sample of teachers in the *rural* and *urban* Education District:

**Table 6.6: Eden and Central Karoo – REQV as reported by teachers in the Educator Questionnaire and as per PERSAL**

REQV	AS PER EQ									
PERSAL	10	11	12	13	14	15	16	17	Don't know	Total
10		1	1	1	4					7
11		20	2							22
12		7	46	9					1	63
13		5	3	521	43	3			7	582
14	15	21	26	133	810	56	15	21	7	1104
15					20	128	16	7	2	173
16					4	8	32	16		60
17							2	6		8
Not Available				1	2	2				5
<b>Total</b>	<b>15</b>	<b>54</b>	<b>78</b>	<b>665</b>	<b>883</b>	<b>197</b>	<b>65</b>	<b>50</b>	<b>17</b>	<b>2024*</b>

\*3 missing from the EQs.

**Table 6.7: Metro East – REQV levels as reported by teachers in the Educator Questionnaire and as per PERSAL**

REQV	AS PER EQ									
PERSAL	10	11	12	13	14	15	16	17	Don't know	Total
10				4	2	1			1	8
11		10	1							11
12	1	2	28	9	1					41
13			4	402	38	5	3	2	1	455
14	4	12	18	144	1163	137	34	17	19	1548
15			1	10	31	192	41	16	10	301
16				1	5	18	51	25	2	102
17						2	2	5		9
Not Available	1	2	1	10	13	1	1	1	6	36
<b>Total</b>	<b>6</b>	<b>26</b>	<b>53</b>	<b>580</b>	<b>1253</b>	<b>356</b>	<b>132</b>	<b>66</b>	<b>39</b>	<b>2511*</b>

\*7 missing from the EQs.

According to information provided on Table 6.6 and Table 6.7:

- In the **rural** Education District, 4-8% of the teachers are *unqualified or under-qualified for current requirements* (M + 1/2) whilst in the **urban** Education District, 2-3% of the teachers are *un or underqualified for current requirements* (M + 1/2). This suggests that a slightly higher proportion of teachers in the rural district are un- or underqualified for *current* requirements than the proportion of teachers in the urban district.
- In the **urban** Education District 74-79% of the teachers are *qualified for future requirements* (M + 4 or more) whilst 18-23% of the teachers are *qualified for current requirements* (M + 3) *but under-qualified for future requirements*. In the **rural** Education

District 60-67% of the teachers are *qualified for future requirements* (M + 4 or more) whilst 29-33% of the teachers are *qualified for current requirements but under-qualified for future requirements*. This summary suggests that there are teachers in both districts who need to upgrade their qualifications from M + 3 to M + 4 but that the proportion of Eden and Central Karoo teachers who need to upgrade is higher than the proportion of Metro East teachers.

### 6.2.1 Teacher age by REQV levels

EQ data on teachers' ages indicate that the oldest teacher in the sample is 78, and the youngest 19.

Table 6.8 provides information, from the EQs, about REQV levels for different age groups of the whole sample of teachers.

**Table 6.8: Number of teachers per age group by REQV as reported in the Educator questionnaire**

Age group	REQV									Total
	10	11	12	13	14	15	16	17	Don't know	
19-29	8		1	11	257	4	1		9	291
30-39	2		1	312	827	93	9	2	16	1262
40-49	3		26	445	976	257	92	7	5	1811
50-59	2	33	69	251	502	111	56	8	7	1039
60-65			8	16	79	8	4			115
66+				1	13				1	15
<b>Total</b>	<b>15</b>	<b>33</b>	<b>105</b>	<b>1036</b>	<b>2654</b>	<b>473</b>	<b>162</b>	<b>17</b>	<b>38</b>	<b>4533</b>

\*12 teachers did not provide their age.

According to the REQV levels and teachers' ages provided via the Educator Questionnaire

- The largest proportion of the 19-29 age group comprise REQV 14 teachers (257), followed by REQV 13 (11). This suggests that most teachers in this age group have at least M + 4 or more.
- The largest proportions of the 30-39, the 40-49, and the 50-59 age groups are all REQV 14, followed by REQV 13 and then by REQV 15. The information on the table suggests that a quarter (26%) of the teachers between the age of 30-49 and a third (34%) of the 50-59 age group will need to upgrade their qualification in terms of future (M + 4) requirements. The counts also suggest that 40-49 age group has the highest number of teachers with REQV levels of more than M + 4.

Tables 6.9 shows data for the sample in the rural district, Eden and Central Karoo; and Table 6.10 the data for the sample in the urban district, Metro East.

**Table 6.9: Eden and Central Karoo – Number of teachers per age group by REQV as reported in the Educator Questionnaire**

Age group	REQV									Total
	10	11	12	13	14	15	16	17	Not Available	
19-29	4		1	1	84					90
30-39	1		1	160	293	29	2		3	489
40-49	1		17	250	423	96	31	3	1	822
50-59	1	22	37	159	256	45	23	5	1	549
60-65			7	12	42	3	4			68
66+					7				1	8
<b>Total</b>	<b>7</b>	<b>22</b>	<b>63</b>	<b>582</b>	<b>1105</b>	<b>173</b>	<b>60</b>	<b>8</b>	<b>6</b>	<b>2026</b>

\*1 teacher did not provide his/her age.

**Table 6.10: Metro East – Number of teachers per age group by REQV as reported in the Educator Questionnaire**

Age group	REQV									Total
	10	11	12	13	14	15	16	17	Not Available	
19-29	4			10	173	4	1		9	201
30-39	1			152	534	64	7	2	13	773
40-49	2		9	195	553	161	61	4	4	989
50-59	1	11	32	92	246	66	33	3	6	490
60-65			1	4	37	5				47
66+				1	6					7
<b>Total</b>	<b>8</b>	<b>1</b>	<b>42</b>	<b>454</b>	<b>1549</b>	<b>300</b>	<b>102</b>	<b>9</b>	<b>32</b>	<b>2507</b>

\*11 teachers did not provide their age.

Data in tables 6.9 and 6.10 show that according to REQV levels and ages provided by teachers in the Educator Questionnaire:

- Most teachers in their 20s in both districts have M + 4.
- The largest proportion of the 30-39 and 40-49 age groups in both districts is REQV 14, followed by REQV 13 and then REQV 15. The information suggests that, in the *rural* district, about a third of the teachers (33%) between the ages of *30-49* will need to upgrade their qualifications in terms of future requirements. In the *urban* district, about a fifth of the teachers (20%) aged between the ages of 30-49 will need to upgrade their qualifications.

- The information also suggests that the proportion of teachers in both districts with REQV levels higher than M + 4 are in the 40-49 age group.
- The largest proportion of the 50-59 age group in both the *rural* and the *urban* district is REQV 14, followed by REQV 13 and then by REQV 15. The figures suggests that, in the *rural* district, around 40% of the 50-59 age group will need to upgrade their qualifications for future requirements, whilst in the *urban* district, under a third of this age group (28%) will need to upgrade their qualifications.

### 6.2.2 Summary

Data suggest the following about practising teachers employed in WCED schools and the ESDA sample schools:

- About 5% of W Cape teachers are unqualified or under-qualified in terms of *current* requirements (M + 1/2). However, 10 245 WCED employed teachers (out of 30 640) are *un- or underqualified* in terms the *future* requirement of M + 4.
- The *40-49* age group has the highest number of sample teachers with REQV levels higher than the future requirement of M + 4.
- Most of the sample teachers in the *19-29* age group in both the rural and the urban district have at least M + 4.
- Around one quarter (26%) of the sample teachers between the age of *30-49* and about a third (34%) of the *50-59* age group will need to upgrade their qualification in terms of future (M + 4) requirements. The cost effectiveness of upgrading the qualification of teachers who are in the 50 to 59 age group, who are nearing retirement, needs to be considered (SAIDE, 2008).
- The proportion of the sample teachers in the *rural* district who need to upgrade their qualifications for future requirements (to M + 4) is higher than the proportion of teachers in the *urban* district. This has implications regarding access to opportunities for rural in-service teachers to upgrade their qualifications for new requirements.

Although, a teacher's REQV is useful for the purpose of determining whether the teacher has formal accredited or recognised qualifications, on its own it does not indicate whether or not teachers are 'appropriately' qualified for teaching a learning area/subject in a particular phase/grade. One of the main foci of the data analysis for the ESDA was the actual match between teachers' subject specialisations and the school level they were trained to teach according to their qualifications, and their current teaching responsibilities. Thus a crucial dimension of this study has been that of assessing the degree of 'match' between teachers' qualifications and subject and

phase specialisations, and the grades, learning areas or subjects teachers taught in 2008. These findings are discussed below.

### 6.3 Teachers by qualification in learning areas/subjects for grade or phase taught

Chapter 5 explains how, as a first layer of data analysis for this dimension, a team conducted a paper-based assessment of information provided in each EQ of the degree of ‘match’ between each teacher’s qualifications and the grades and learning areas/subjects teachers reported that they were teaching in 2008. Team members examined the details provided by each teacher and then tried to ‘*identify whether or not the particular teacher was qualified to teach the subjects and levels that s/he was teaching*’. This process involved making a judgement on the extent to which individual teachers were teaching in their field of expertise by using the following codes:

- a ‘match’ where a teacher only teaches learning areas/subjects for which s/he is qualified at an appropriate level
- a ‘partial match’ which implied that the teacher is partially within his/her field of expertise
- ‘no match’ where there was no evidence that a teacher had subject/s in his/her qualifications at an appropriate level for the learning areas/subjects and the grades/phases that s/he is teaching; and is teaching out of their field of training
- ‘can’t match’ when insufficient information was provided in the EQs either with regard to the learning areas/subjects and grades the teachers are teaching or with regard to their qualifications details.

Chapter 5 also provides an important and detailed discussion of the challenges involved in the process. Nevertheless, this initial analysis using the teacher as the unit of analysis, rendered the following assessment of the degree of ‘match’ between each teacher’s qualifications and the grades and learning areas/subjects that each teacher reported to be teaching in 2008.

**Table 6.11: Assessment of teacher to teaching field ‘match’**

	<b>Number</b>	<b>Percentage</b>
Match	2811	62
Partial match	1019	22
No match	664	15
Cannot match	51	1
<b>Total</b>	<b>4545</b>	<b>100</b>

Data in Table 6.11 suggest that 84% of the sample of teachers are either teaching within their field of expertise or are partially within their field of study.<sup>30</sup> However, this initial round of analysis had limitations. Specifically, it was not useful for establishing:

- which learning areas/subjects are most commonly taught by teachers who are teaching out of their field or area of specialisation or level of professional teaching qualification
- what subject specialisations teachers deemed to be teaching within their field of expertise, most commonly have. This was considered important particularly for the more ‘integrated’ GET learning areas and for the newer more ‘work-related’ FET subjects. For example, we also wanted to establish the extent to which teachers, who are considered to have ‘appropriate’ subject qualification to teach Arts and Culture, have Music rather than Art, or Dance, or Drama in their qualifications.

Therefore, in the electronic analysis of captured data for Senior and Intermediate Phases and FET, the learning area/subject and grade level or class was used as the unit of analysis. These findings are presented in section 6.3.1.

### 6.3.1 Learning area/subject and phase or grade

The following criteria for ‘acceptable’ levels of professional teaching qualifications were applied in the analysis of supply by learning area/subject and grade (based on codes provided in the EQ).

**Table 6.12: Levels of professional teaching qualifications applicable for grades**

<b>Grade</b>	<b>Categories of qualification school levels</b>
Grades R	Pre-primary/Early Childhood Development (ECD). Junior Primary/Foundation Phase (including Reception Year/Grade R)/Lower Primary.
Grade 1-3	Junior Primary/Foundation Phase (including Reception Year/Grade R)/Lower Primary
Grade 4	Junior Primary/Foundation Phase (including Reception Year/Grade R)/Lower Primary. Senior Primary/Intermediate Phase/Intermediate and Senior Phase. Primary (in general).
Grade 5-6	Senior Primary/Intermediate Phase/Intermediate and Senior Phase. Primary (in general). Lower Secondary/Senior Phase.
Grade 7-8	Senior Primary/Intermediate Phase/Intermediate and Senior Phase. Primary (in general). Lower Secondary/Senior Phase. Secondary/Upper Secondary/ Senior phase and/or Further Education Training
Grade 9	Senior Primary/Intermediate Phase/Intermediate and Senior Phase Lower Secondary/Senior Phase Secondary/Upper Secondary/Senior phase and/or Further Education Training
Grade 10-12	Secondary/Upper Secondary/Senior phase and/or Further Education Training

<sup>30</sup> Researchers also noted that some teachers were clearly employed in posts on the basis of their informal INSET training or other training they had received, especially teachers with computer literacy.

### 6.3.1.1 Foundation Phase (Grades R-3)

At the Foundation Phase (FP), each class was the unit of analysis, because, at this level, teachers are generally class teachers who teach all learning programmes to a single class.

#### *GRADE R in the Foundation Phase*

Acceptable school level qualifications at the Grade R level included teaching qualifications for:

- Pre-primary/Early Childhood Development (ECD)
- Junior Primary/Foundation Phase/Lower Primary.

The criterion was that a teacher had trained to teach the Grade R level. Thus under-qualified teachers with ‘outdated’ two-year teaching certificates (REQV 11 or 12), and Grade R teachers with ECD or Educare qualifications not necessarily recognised by the DoE were deemed as having ‘acceptable’ qualifications.

The analysis of the EQ data showed that the sample teachers reported teaching a total of 108 Grade R classes. The teachers of 60 (56%) of these Grade R classes reported that they *either* had Pre-primary/ ECD, *or* Junior Primary/Foundation Phase/Lower Primary teaching qualifications. 44 of these 60 teachers (41%) apparently had Junior Primary/Foundation Phase/Lower Primary qualifications as opposed to Pre-primary/ECD qualifications.)

Teachers of 48 (44%) classes did not appear to have any appropriate qualifications for teaching at the Grade R level.

#### *GRADES 1-3 in the Foundation Phase*

‘Acceptable’ school level qualifications for the Grades 1-3 included teaching qualifications for Junior Primary/Foundation Phase/Lower Primary. This included under-qualified teachers with outdated two-year teaching certificates (REQV 11 or 12) as long as they were trained to teach the correct level. It excluded Intermediate and Senior Phase and FET trained teachers, as they are not training in early literacy teaching, etc.

Table 6.13 shows data emerging from the analysis for the sample of Grade 1-3 classes.

**Table 6.13: School level qualifications of teachers of Grade 1-3 classes**

Foundation Phase Grade 1-3			
GRADE	No qual	Qual	Total
1	33	284	317
2	36	264	300
3	44	226	270
<b>Total</b>	<b>113</b>	<b>774</b>	<b>887</b>

The EQ data on Table 6.13 show that teachers in the sample reported teaching a total of 317 Grade 1 classes; 300 Grade 2 classes; and 270 Grade 3 classes (or a total of 887 Grade 1-3 classes).

- 90% of the teachers of **Grade 1** classes reported that they have Junior Primary/Foundation Phase/Lower Primary teaching qualifications.
- 88% of the teachers of **Grade 2** classes reportedly have teaching qualifications at an appropriate level.
- 84% of the **Grade 3** classes reportedly have teaching qualifications at the appropriate level.

This suggests that, of the total number of **Grade 1-3** classes in the sample, 87% were being taught by teachers with professional qualifications orientated around teaching at the grade level. The teachers of 113 (13%) of the total number of **Grade 1-3** classes apparently did not have professional qualifications for teaching at the level. 16% of **Grade 3** classes did not appear to have teachers with Junior Primary/Foundation Phase/Lower Primary teaching qualifications as compared to 10% of **Grade 1** classes. (Some of these classes may be taught by teachers with Senior Primary or Intermediate qualifications.)

***Foundation Phase class teachers (home language/s and the language of instruction)***

The EQ asked teachers to report on the language/s they most spoke at home. Some teachers reported that they speak *more than one language at home*. As the three main ‘official’ language/s are languages of learning and teaching (LOLT) in the Western Cape are the main concern, the analysis focused on information as to whether teachers spoke English, Afrikaans and/or isiXhosa at home. Tables 6.14 - 6.16 provide data on the number Foundation Phase *classes* (Grades R-3) with teachers who reported that they speak a particular language at home.<sup>31</sup>

**Table 6.14: Number of FP classes by language of instruction, when English is the home language of the teacher**

LOI	English home language of teacher		Total
	No	Yes	
English	64	104	168
Dual med Afrik/Eng	11	4	15
Afrikaans	553	65	618
isiXhosa	287	50	337
Other	1	0	1
<b>Total</b>	<b>916</b>	<b>223</b>	<b>1139</b>

<sup>31</sup> There are three tables because some teachers reported that they speak more than one of the three main languages at home.

Data in Table 6.14 indicate that in 104 of the 168 Foundation Phase (Grades R-3) classes where the language of instruction was English, the teacher reported English as a home language. In the 15 English/Afrikaans dual medium classes, 4 of the teachers reported English as a home language.

**Table 6.15: Number of FP classes by language of instruction, when Afrikaans is the home language of teacher**

LOI	Afrikaans home lang of teacher		Total
	No	Yes	
English	82	86	168
Dual med Afrik/Eng	3	12	15
Afrikaans	17	601	618
isiXhosa	331	6	337
Other	1	0	1
<b>Total</b>	<b>434</b>	<b>705</b>	<b>1139</b>

Data in Table 6.15 indicate that in 601 of the 618 Foundation Phase (Grades R-3) classes where the language of instruction was Afrikaans, the teacher reported Afrikaans as a home language. In the 15 English/Afrikaans dual medium classes, 12 of the teachers reported that Afrikaans is a home language.

**Table 6.16: Number of FP classes by language of instruction, when isiXhosa is the home language of teacher**

LOI	isiXhosa home language of teacher		Total
	No	Yes	
English	162	6	168
Dual med Afrik/Eng	15		15
Afrikaans	618		618
isiXhosa	6	331	337
Other		1	1
<b>Total</b>	<b>801</b>	<b>338</b>	<b>1139</b>

Data in Table 6.16 indicate that teachers reported isiXhosa as a home language for 331 out of the 337 Foundation Phase (grade R-3) *classes* where the language of instruction is isiXhosa.

Data indicate that, in the majority of cases, FP classes in the sample are being taught by teachers who speak the language of instruction at home. However, in Afrikaans/English dual medium classes teachers more commonly speak Afrikaans at home than English. This has implications particularly for children who are mother-tongue isiXhosa attending predominantly Afrikaans medium schools but where English is offered as a medium of instruction.

### 6.3.1.2 Grades 5-9: Intermediate and Senior Phase

Tables 6.17-6.26 show data emerging from the analysis of each of the *GET learning areas* for *Grades 5-9*. Data in the tables provide an indication of which learning area grade levels were taught by teachers teaching in or out of a) their subject field or area of specialisation, or b) level of professional teaching qualification. An assumption underpinning the analysis is that a teacher holding a formal qualification in a particular learning area or subject and school level is better prepared for teaching that subject than a teacher without such a qualification.

The first level of analysis identifies the number of classes in 2008 with teachers with (a minor or a major) subject in their qualifications that is linked to the particular learning area. The second level of analysis takes into consideration teachers' subject qualifications as well as their school level professional teaching qualifications. In other words, the second level identifies the number of classes where the teacher has both a subject and a school level professional teaching qualifications linked to the grade level learning area.

Appendix E provides the framework with the subjects deemed 'acceptable' for each learning area. Table 6.12 provides the criteria used for 'acceptable' levels of professional teaching qualifications for the various grades in the analysis. Electronic data processing entailed searching for the relevant codes for each of the subjects and grade levels.

Information on the tables is also provided by teacher *gender* and by *Education District*. An interest was also in the relationship that exists between the qualifications of teachers and some of the characteristics of the schools. In particular, we were interested in establishing whether teachers in higher-poverty schools are more often taught by teachers teaching out of their field and school level professional qualification. Thus included on the tables are comparative data for fee and *no-fee schools*; *Section 21* and non-Section 21 schools; and *quintile 5* schools as compared to *non-quintile 5* schools (i.e. Quintile 1-4 schools combined). Rows in bold provide the percentage for each category.

Briefly, Section 21 schools manage their own financial status. Non-Section 21 schools have their financial affairs managed by the Education Department. For a school to be declared Section 21, it has to demonstrate to the WCED that it has the capacity to manage its own affairs. No-fee schools (quintiles 1, 2 and 3) are the poorest 45% in the Province and are allocated a subsidy per child.<sup>32</sup> Quintile 5 schools are the most affluent schools. A school's quintile is determined by the relative poverty of the surrounding community. This is based on individual and household incomes from

---

<sup>32</sup> 83 (55%) of the sample schools are quintile 1, 2 or 3 schools.

Statistics SA data. The idea is that schools with higher quintiles are more able to raise income from school fees. Hence, for example, the recommended state allocation per learner for a quintile 5 school in 2007 was R123, and for a quintile 1 school was R738. However, the quintile ranking of middle range schools (quintiles 2-4) often do not reflect the fact that schools attract significant numbers of learners from poorer backgrounds living in other areas such as informal settlements, etc. Therefore, a distinction has been drawn between classes in schools in the top quintile 5 and the four lower quintiles 1-4 in the data analysis.

This level of analysis relates to the sub-questions for the ESDA: *What relationship exists between the qualifications of educators and other characteristics of the school, including the quintile of the school, **the pass rate, learner performance**, and the home language of the majority of the learners?*

On the one hand, international research evidence is that limited associations have been found between teacher qualifications and learning outcomes assessed through pass rates or results of systemic testing (Boe and Gilford, 1992). On the other hand, in South Africa, a study by Crouch and Mabogoane (2001) identified teacher qualifications as strongly correlated with matric results. The Progress in International Reading Literacy Study (PIRLS) 2006 also found that learners taught by language teachers who reported having post-graduate degrees showed an ‘improved overall mean performance’ in comparison to learners whose teachers were not as well qualified (Howie et al, 2007). Furthermore, analysis of data from the Southern (& Eastern) Africa Consortium for Monitoring Educational Quality II (SACMEQ II) by Van der Berg (2005:69) showed that, in South Africa, and in the Western Cape in particular, children in affluent or ‘least poor’ schools ‘the top layer of schools (historically white and Indian schools)’ performed significantly better than children in ‘schools with a lower mean SES [lower socio-economic status] (historically black schools)’.

**Table 6.17: GET learning area counts and % profiles – Afrikaans Home Language and First Additional Language**

GRADE	Afrikaans Home Language					Afrikaans First Additional Language				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	60	61	57	50	48	25	27	24	25	21
Number of teachers teaching	100	88	75	104	94	29	32	31	31	34
Number of classes with teachers	189	174	163	204	195	55	55	54	66	67
Teachers' class size not reported	1	4	3	1	1	0	1	0	0	0
Teachers' average age (yrs)	44	45	47	44	44	44	45	43	44	43
Reported no. learners with teachers	6749	6297	5710	7793	7242	2092	1899	2084	2391	2615
with subject qual	6169	5922	4974	6296	6310	1494	990	1008	1640	2026
with subj and prof level	4952	5496	3746	5723	5024	1052	776	873	1640	1762
<b>% with subject qual</b>	<b>91</b>	<b>94</b>	<b>87</b>	<b>81</b>	<b>87</b>	<b>71</b>	<b>52</b>	<b>48</b>	<b>69</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>87</b>	<b>66</b>	<b>73</b>	<b>69</b>	<b>50</b>	<b>41</b>	<b>42</b>	<b>69</b>	<b>67</b>
<b>Teachers</b>	100	88	75	104	94	29	32	31	31	34
with subject qual	89	82	68	87	82	23	23	17	23	25
with subj and prof level	71	72	55	81	67	16	19	16	23	20
<b>% with subject qual</b>	<b>89</b>	<b>93</b>	<b>91</b>	<b>84</b>	<b>87</b>	<b>79</b>	<b>72</b>	<b>55</b>	<b>74</b>	<b>74</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>82</b>	<b>73</b>	<b>78</b>	<b>71</b>	<b>55</b>	<b>59</b>	<b>52</b>	<b>74</b>	<b>59</b>
<b>Female teachers</b>	57	41	27	63	56	23	22	17	27	29
with subject qual	52	37	23	53	48	18	17	10	19	21
with subj and prof level	41	30	17	49	38	13	14	9	19	17
<b>% with subject qual</b>	<b>91</b>	<b>90</b>	<b>85</b>	<b>84</b>	<b>86</b>	<b>78</b>	<b>77</b>	<b>59</b>	<b>70</b>	<b>72</b>
<b>% with subj and prof level</b>	<b>72</b>	<b>73</b>	<b>63</b>	<b>78</b>	<b>68</b>	<b>57</b>	<b>64</b>	<b>53</b>	<b>70</b>	<b>59</b>
<b>Male teachers</b>	43	47	48	41	38	6	10	14	4	5
with subject qual	37	45	45	34	34	5	6	7	4	4
with subj and prof level	30	42	38	32	29	3	5	7	4	3
<b>% with subject qual</b>	<b>86</b>	<b>96</b>	<b>94</b>	<b>83</b>	<b>89</b>	<b>83</b>	<b>60</b>	<b>50</b>	<b>100</b>	<b>80</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>89</b>	<b>79</b>	<b>78</b>	<b>76</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>100</b>	<b>60</b>
<b>Eden &amp; Karoo teachers</b>	69	56	47	62	52	7	6	7	3	8
with subject qual	64	53	45	53	47	6	6	5	2	5
with subj and prof level	48	45	37	47	38	3	3	5	2	2
<b>% with subject qual</b>	<b>93</b>	<b>95</b>	<b>96</b>	<b>85</b>	<b>90</b>	<b>86</b>	<b>100</b>	<b>71</b>	<b>67</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>80</b>	<b>79</b>	<b>76</b>	<b>73</b>	<b>43</b>	<b>50</b>	<b>71</b>	<b>67</b>	<b>25</b>
<b>Metro East teachers</b>	31	32	28	42	42	22	26	24	28	26
with subject qual	25	29	23	34	35	17	17	12	21	20
with subj and prof level	23	27	18	34	29	13	16	11	21	18
<b>% with subject qual</b>	<b>81</b>	<b>91</b>	<b>82</b>	<b>81</b>	<b>83</b>	<b>77</b>	<b>65</b>	<b>50</b>	<b>75</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>84</b>	<b>64</b>	<b>81</b>	<b>69</b>	<b>59</b>	<b>62</b>	<b>46</b>	<b>75</b>	<b>69</b>

**Table 6.17: GET learning area counts and % profiles – Afrikaans Home Language and First Additional Language (contd)**

GRADE	Afrikaans Home Language					Afrikaans First Additional Language				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
<b>Section 21</b> school teachers	85	76	63	91	78	23	22	23	19	27
with subject qual	76	70	59	80	73	17	16	13	15	21
with subj and prof level	59	61	48	74	59	13	14	12	15	17
% with subject qual	<b>89</b>	<b>92</b>	<b>94</b>	<b>88</b>	<b>94</b>	<b>74</b>	<b>73</b>	<b>57</b>	<b>79</b>	<b>78</b>
% with subj and prof level	<b>69</b>	<b>80</b>	<b>76</b>	<b>81</b>	<b>76</b>	<b>57</b>	<b>64</b>	<b>52</b>	<b>79</b>	<b>63</b>
<b>Non-Section 21</b> school teachers	15	12	12	13	16	6	10	8	12	7
with subject qual	13	12	9	7	9	6	7	4	8	4
with subj and prof level	12	11	7	7	8	3	5	4	8	3
% with subject qual	<b>87</b>	<b>100</b>	<b>75</b>	<b>54</b>	<b>56</b>	<b>100</b>	<b>70</b>	<b>50</b>	<b>67</b>	<b>57</b>
% with subj and prof level	<b>80</b>	<b>92</b>	<b>58</b>	<b>54</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>67</b>	<b>43</b>
Teachers in <b>no-fee</b> schools	46	40	36	26	23	9	9	7	7	5
with subject qual	42	37	33	19	16	6	3	2	3	4
with subj and prof level	32	31	27	15	10	4	1	2	3	3
% with subject qual	<b>91</b>	<b>93</b>	<b>92</b>	<b>73</b>	<b>70</b>	<b>67</b>	<b>33</b>	<b>29</b>	<b>43</b>	<b>80</b>
% with subj and prof level	<b>70</b>	<b>78</b>	<b>75</b>	<b>58</b>	<b>43</b>	<b>44</b>	<b>11</b>	<b>29</b>	<b>43</b>	<b>60</b>
Teachers in schools <b>with fees</b>	54	48	39	78	71	20	23	24	24	29
with subject qual	47	45	35	68	66	17	20	15	20	21
with subj and prof level	39	41	28	66	57	12	18	14	20	17
% with subject qual	<b>87</b>	<b>94</b>	<b>90</b>	<b>87</b>	<b>93</b>	<b>85</b>	<b>87</b>	<b>63</b>	<b>83</b>	<b>72</b>
% with subj and prof level	<b>72</b>	<b>85</b>	<b>72</b>	<b>85</b>	<b>80</b>	<b>60</b>	<b>78</b>	<b>58</b>	<b>83</b>	<b>59</b>
Teachers in <b>quintile 5</b> schools	31	31	25	54	59	19	22	23	22	28
with subject qual	27	28	22	48	55	16	19	14	18	21
with subj and prof level	26	25	18	48	47	12	18	13	18	17
% with subject qual	<b>87</b>	<b>90</b>	<b>88</b>	<b>89</b>	<b>93</b>	<b>84</b>	<b>86</b>	<b>61</b>	<b>82</b>	<b>75</b>
% with subj and prof level	<b>84</b>	<b>81</b>	<b>72</b>	<b>89</b>	<b>80</b>	<b>63</b>	<b>82</b>	<b>57</b>	<b>82</b>	<b>61</b>
Teachers in <b>non-quintile 5</b> schools	69	57	50	50	35	10	10	8	9	6
with subject qual	62	54	46	39	27	7	4	3	5	4
with subj and prof level	45	47	37	33	20	4	1	3	5	3
% with subject qual	<b>90</b>	<b>95</b>	<b>92</b>	<b>78</b>	<b>77</b>	<b>70</b>	<b>40</b>	<b>38</b>	<b>56</b>	<b>67</b>
% with subj and prof level	<b>65</b>	<b>82</b>	<b>74</b>	<b>66</b>	<b>57</b>	<b>40</b>	<b>10</b>	<b>38</b>	<b>56</b>	<b>50</b>

**Table 6.18: GET learning area counts and % profiles – English Home Language and First Additional Language**

GRADE	English Home Language					English First Additional Language				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	25	26	22	21	20	76	80	72	67	63
Number of teachers teaching	35	33	31	36	32	108	105	92	118	118
Number of classes with teachers	67	59	56	56	54	236	230	213	295	420
Teachers' class size not reported	0	0	2	1	1	1	1	2	2	5
Teachers' average age (yrs)	47	47	47	45	44	43	43	43	42	41
Reported no. learners with teachers	2748	2280	1879	2076	2055	9190	9539	8539	9553	10817
with subject qual	2066	1374	1593	1326	1399	7115	7472	6608	8203	8616
with subj and prof level	1568	1042	1389	1200	1372	5848	6452	5951	7646	7867
% with subject qual	<b>75</b>	<b>60</b>	<b>85</b>	<b>64</b>	<b>68</b>	<b>77</b>	<b>78</b>	<b>77</b>	<b>86</b>	<b>80</b>
% with subj and prof level	<b>57</b>	<b>46</b>	<b>74</b>	<b>58</b>	<b>67</b>	<b>64</b>	<b>68</b>	<b>70</b>	<b>80</b>	<b>73</b>
<b>Teachers</b>	35	33	31	36	32	108	105	92	118	118
with subject qual	26	22	27	28	27	82	80	71	101	99
with subj and prof level	21	18	25	27	26	66	68	64	97	87
% with subject qual	<b>74</b>	<b>67</b>	<b>87</b>	<b>78</b>	<b>84</b>	<b>76</b>	<b>76</b>	<b>77</b>	<b>86</b>	<b>84</b>
% with subj and prof level	<b>60</b>	<b>55</b>	<b>81</b>	<b>75</b>	<b>81</b>	<b>61</b>	<b>65</b>	<b>70</b>	<b>82</b>	<b>74</b>
<b>Female teachers</b>	27	26	24	29	27	73	65	48	85	86
with subject qual	20	17	21	24	24	57	52	37	74	72
with subj and prof level	16	14	20	24	23	45	45	35	73	65
% with subject qual	<b>74</b>	<b>65</b>	<b>88</b>	<b>83</b>	<b>89</b>	<b>78</b>	<b>80</b>	<b>77</b>	<b>87</b>	<b>84</b>
% with subj and prof level	<b>59</b>	<b>54</b>	<b>83</b>	<b>83</b>	<b>85</b>	<b>62</b>	<b>69</b>	<b>73</b>	<b>86</b>	<b>76</b>
<b>Male teachers</b>	8	7	7	7	5	35	40	44	33	32
with subject qual	6	5	6	4	3	25	28	34	27	27
with subj and prof level	5	4	5	3	3	21	23	29	24	22
% with subject qual	<b>75</b>	<b>71</b>	<b>86</b>	<b>57</b>	<b>60</b>	<b>71</b>	<b>70</b>	<b>77</b>	<b>82</b>	<b>84</b>
% with subj and prof level	<b>63</b>	<b>57</b>	<b>71</b>	<b>43</b>	<b>60</b>	<b>60</b>	<b>58</b>	<b>66</b>	<b>73</b>	<b>69</b>
<b>Eden &amp; Karoo teachers</b>	8	10	5	8	8	64	51	45	50	49
with subject qual	7	9	5	6	7	50	42	37	41	42
with subj and prof level	6	6	5	6	7	39	33	31	39	35
% with subject qual	<b>88</b>	<b>90</b>	<b>100</b>	<b>75</b>	<b>88</b>	<b>78</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>86</b>
% with subj and prof level	<b>75</b>	<b>60</b>	<b>100</b>	<b>75</b>	<b>88</b>	<b>61</b>	<b>65</b>	<b>69</b>	<b>78</b>	<b>71</b>
<b>Metro East teachers</b>	27	23	26	28	24	44	54	47	68	69
with subject qual	19	13	22	22	20	32	38	34	60	57
with subj and prof level	15	12	20	21	19	27	35	33	58	52
% with subject qual	<b>70</b>	<b>57</b>	<b>85</b>	<b>79</b>	<b>83</b>	<b>73</b>	<b>70</b>	<b>72</b>	<b>88</b>	<b>83</b>
% with subj and prof level	<b>56</b>	<b>52</b>	<b>77</b>	<b>75</b>	<b>79</b>	<b>61</b>	<b>65</b>	<b>70</b>	<b>85</b>	<b>75</b>

**Table 6.18: GET learning area counts and % profiles – English Home Language and First Additional Language (contd)**

GRADE	English Home Language					English First Additional Language				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
<b>Section 21</b> school teachers	27	26	26	30	26	80	69	64	83	81
with subject qual	20	18	24	25	25	58	50	50	71	69
with subj and prof level	16	16	22	25	24	44	40	43	68	60
% with subject qual	<b>74</b>	<b>69</b>	<b>92</b>	<b>83</b>	<b>96</b>	<b>73</b>	<b>72</b>	<b>78</b>	<b>86</b>	<b>85</b>
% with subj and prof level	<b>59</b>	<b>62</b>	<b>85</b>	<b>83</b>	<b>92</b>	<b>55</b>	<b>58</b>	<b>67</b>	<b>82</b>	<b>74</b>
<b>Non-Section 21</b> school teachers	8	7	5	6	6	28	36	28	35	37
with subject qual	6	4	3	3	2	24	30	21	30	30
with subj and prof level	5	2	3	2	2	22	28	21	29	27
% with subject qual	<b>75</b>	<b>57</b>	<b>60</b>	<b>50</b>	<b>33</b>	<b>86</b>	<b>83</b>	<b>75</b>	<b>86</b>	<b>81</b>
% with subj and prof level	<b>63</b>	<b>29</b>	<b>60</b>	<b>33</b>	<b>33</b>	<b>79</b>	<b>78</b>	<b>75</b>	<b>83</b>	<b>73</b>
Teachers in <b>no-fee</b> schools	8	5	5	2	2	71	66	55	54	54
with subject qual	6	2	3	0	0	59	53	41	46	44
with subj and prof level	5	1	3	0	0	49	45	36	43	38
% with subject qual	<b>75</b>	<b>40</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>83</b>	<b>80</b>	<b>75</b>	<b>85</b>	<b>81</b>
% with subj and prof level	<b>63</b>	<b>20</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>69</b>	<b>68</b>	<b>65</b>	<b>80</b>	<b>70</b>
Teachers in schools <b>with fees</b>	27	28	26	34	30	37	39	37	64	64
with subject qual	20	20	24	28	27	23	27	30	55	55
with subj and prof level	16	17	22	27	26	17	23	28	54	49
% with subject qual	<b>74</b>	<b>71</b>	<b>92</b>	<b>82</b>	<b>90</b>	<b>62</b>	<b>69</b>	<b>81</b>	<b>86</b>	<b>86</b>
% with subj and prof level	<b>59</b>	<b>61</b>	<b>85</b>	<b>79</b>	<b>87</b>	<b>46</b>	<b>59</b>	<b>76</b>	<b>84</b>	<b>77</b>
Teachers in <b>quintile 5</b> schools	24	26	25	32	30	22	25	20	49	48
with subject qual	17	18	23	26	27	14	15	14	43	43
with subj and prof level	14	17	22	25	26	12	14	14	43	39
% with subject qual	<b>71</b>	<b>69</b>	<b>92</b>	<b>81</b>	<b>90</b>	<b>64</b>	<b>60</b>	<b>70</b>	<b>88</b>	<b>90</b>
% with subj and prof level	<b>58</b>	<b>65</b>	<b>88</b>	<b>78</b>	<b>87</b>	<b>55</b>	<b>56</b>	<b>70</b>	<b>88</b>	<b>81</b>
Teachers in <b>non-quintile 5</b> schools	11	7	6	4	2	86	80	72	69	70
with subject qual	9	4	4	2	0	68	65	57	58	56
with subj and prof level	7	1	3	2	0	54	54	50	54	48
% with subject qual	<b>82</b>	<b>57</b>	<b>67</b>	<b>50</b>	<b>0</b>	<b>79</b>	<b>81</b>	<b>79</b>	<b>84</b>	<b>80</b>
% with subj and prof level	<b>64</b>	<b>14</b>	<b>50</b>	<b>50</b>	<b>0</b>	<b>63</b>	<b>68</b>	<b>69</b>	<b>78</b>	<b>69</b>

**Table 6.19: GET learning area counts and % profiles – isiXhosa Home Language and First Additional Language**

GRADE	isiXhosa Home Language					isiXhosa First Additional Language				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	24	26	24	20	21	6	3	8	3	9
Number of teachers teaching	31	38	27	35	38	6	3	10	4	10
Number of classes with teachers	84	92	68	275	210	12	150	117	100	33
Teachers' class size not reported	0	0	0	0	0	0	0	0	1	0
Teachers' average age (yrs)	44	42	41	42	40	38	42	40	44	40
Reported no. learners with teachers	3251	4053	2898	3364	5217	593	272	1118	381	1334
with subject qual	2708	3579	2793	2825	4687	593	184	878	276	821
with subj and prof level	2166	3144	2574	2825	4045	593	184	748	276	821
% with subject qual	<b>83</b>	<b>88</b>	<b>96</b>	<b>84</b>	<b>90</b>	<b>100</b>	<b>68</b>	<b>79</b>	<b>72</b>	<b>62</b>
% with subj and prof level	<b>67</b>	<b>78</b>	<b>89</b>	<b>84</b>	<b>78</b>	<b>100</b>	<b>68</b>	<b>67</b>	<b>72</b>	<b>62</b>
<b>Teachers</b>	31	38	27	35	38	6	3	10	4	10
with subject qual	26	34	26	27	34	6	2	9	3	6
with subj and prof level	20	29	23	27	29	6	2	8	3	6
% with subject qual	<b>84</b>	<b>89</b>	<b>96</b>	<b>77</b>	<b>89</b>	<b>100</b>	<b>67</b>	<b>90</b>	<b>75</b>	<b>60</b>
% with subj and prof level	<b>65</b>	<b>76</b>	<b>85</b>	<b>77</b>	<b>76</b>	<b>100</b>	<b>67</b>	<b>80</b>	<b>75</b>	<b>60</b>
<b>Female teachers</b>	19	23	16	25	27	2	1	5	2	6
with subject qual	15	20	15	21	24	2	1	5	1	4
with subj and prof level	11	18	14	21	21	2	1	5	1	4
% with subject qual	<b>79</b>	<b>87</b>	<b>94</b>	<b>84</b>	<b>89</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>67</b>
% with subj and prof level	<b>58</b>	<b>78</b>	<b>88</b>	<b>84</b>	<b>78</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>67</b>
<b>Male teachers</b>	12	15	11	10	11	4	2	5	2	4
with subject qual	11	14	11	6	10	4	1	4	2	2
with subj and prof level	9	11	9	6	8	4	1	3	2	2
% with subject qual	<b>92</b>	<b>93</b>	<b>100</b>	<b>60</b>	<b>91</b>	<b>100</b>	<b>50</b>	<b>80</b>	<b>100</b>	<b>50</b>
% with subj and prof level	<b>75</b>	<b>73</b>	<b>82</b>	<b>60</b>	<b>73</b>	<b>100</b>	<b>50</b>	<b>60</b>	<b>100</b>	<b>50</b>
<b>Eden &amp; Karoo teachers</b>	12	14	8	5	7	1	1	4	1	1
with subject qual	9	12	8	5	7	1	1	4	1	1
with subj and prof level	6	10	6	5	7	1	1	4	1	1
% with subject qual	<b>75</b>	<b>86</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
% with subj and prof level	<b>50</b>	<b>71</b>	<b>75</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Metro East teachers</b>	19	24	19	30	31	5	2	6	3	9
with subject qual	17	22	18	22	27	5	1	5	2	5
with subj and prof level	14	19	17	22	22	5	1	4	2	5
% with subject qual	<b>89</b>	<b>92</b>	<b>95</b>	<b>73</b>	<b>87</b>	<b>100</b>	<b>50</b>	<b>83</b>	<b>67</b>	<b>56</b>
% with subj and prof level	<b>74</b>	<b>79</b>	<b>89</b>	<b>73</b>	<b>71</b>	<b>100</b>	<b>50</b>	<b>67</b>	<b>67</b>	<b>56</b>

**Table 6.19: GET learning area counts and % profiles – isiXhosa Home Language and First Additional Language (contd)**

GRADE	isiXhosa Home Language					isiXhosa First Additional Language				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
<b>Section 21</b> school teachers	21	19	13	9	11	2	1	6	1	6
with subject qual	17	16	13	9	11	2	0	5	0	3
with subj and prof level	12	13	10	9	10	2	0	4	0	3
% with subject qual	<b>81</b>	<b>84</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>83</b>	<b>0</b>	<b>50</b>
% with subj and prof level	<b>57</b>	<b>68</b>	<b>77</b>	<b>100</b>	<b>91</b>	<b>100</b>	<b>0</b>	<b>67</b>	<b>0</b>	<b>50</b>
<b>Non-Section 21</b> school teachers	10	19	14	26	27	4	2	4	3	4
with subject qual	9	18	13	18	23	4	2	4	3	3
with subj and prof level	8	16	13	18	19	4	2	4	3	3
% with subject qual	<b>90</b>	<b>95</b>	<b>93</b>	<b>69</b>	<b>85</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>75</b>
% with subj and prof level	<b>80</b>	<b>84</b>	<b>93</b>	<b>69</b>	<b>70</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>75</b>
Teachers in <b>no-fee</b> schools	30	38	27	34	37	6	3	9	4	8
with subject qual	26	34	26	26	33	6	2	9	3	5
with subj and prof level	20	29	23	26	28	6	2	8	3	5
% with subject qual	<b>87</b>	<b>89</b>	<b>96</b>	<b>76</b>	<b>89</b>	<b>100</b>	<b>67</b>	<b>100</b>	<b>75</b>	<b>63</b>
% with subj and prof level	<b>67</b>	<b>76</b>	<b>85</b>	<b>76</b>	<b>76</b>	<b>100</b>	<b>67</b>	<b>89</b>	<b>75</b>	<b>63</b>
Teachers in schools <b>with fees</b>	1	0	0	1	1	0	0	1	0	2
with subject qual	0	0	0	1	1	0	0	0	0	1
with subj and prof level	0	0	0	1	1	0	0	0	0	1
% with subject qual	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>
% with subj and prof level	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>
Teachers in <b>quintile 5</b> schools	1	0	0	0	0	0	0	1	0	2
with subject qual	0	0	0	0	0	0	0	0	0	1
with subj and prof level	0	0	0	0	0	0	0	0	0	1
% with subject qual	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>
% with subj and prof level	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>
Teachers in <b>non-quintile 5</b> schools	30	38	27	35	38	6	3	9	4	8
with subject qual	26	34	26	27	34	6	2	9	3	5
with subj and prof level	20	29	23	27	29	6	2	8	3	5
% with subject qual	<b>87</b>	<b>89</b>	<b>96</b>	<b>77</b>	<b>89</b>	<b>100</b>	<b>67</b>	<b>100</b>	<b>75</b>	<b>63</b>
% with subj and prof level	<b>67</b>	<b>76</b>	<b>85</b>	<b>77</b>	<b>76</b>	<b>100</b>	<b>67</b>	<b>89</b>	<b>75</b>	<b>63</b>

**Table 6.20: GET learning area counts and % profiles – Mathematics**

GRADE	Mathematics				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	85	82	69	64	78
Number of teachers teaching	146	134	114	178	156
Number of classes with teachers	478	290	392	325	314
Teachers' class size not reported	1	0	2	0	0
Teachers' average age (yrs)	44	44	43	40	41
Reported no. learners with teachers	11210	11286	10017	13091	12567
with subject qual	5942	6325	6881	8668	10278
with subj and prof level	5264	5745	6341	7947	8172
<b>% with subject qual</b>	<b>53</b>	<b>56</b>	<b>69</b>	<b>66</b>	<b>82</b>
<b>% with subj and prof level</b>	<b>47</b>	<b>51</b>	<b>63</b>	<b>61</b>	<b>65</b>
<b>Teachers</b>	146	134	114	178	156
with subject qual	71	73	79	125	127
with subj and prof level	65	66	73	117	103
<b>% with subject qual</b>	<b>49</b>	<b>54</b>	<b>69</b>	<b>70</b>	<b>81</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>49</b>	<b>64</b>	<b>66</b>	<b>66</b>
<b>Female teachers</b>	89	65	38	99	80
with subject qual	48	42	24	73	68
with subj and prof level	44	36	22	67	57
<b>% with subject qual</b>	<b>54</b>	<b>65</b>	<b>63</b>	<b>74</b>	<b>85</b>
<b>% with subj and prof level</b>	<b>49</b>	<b>55</b>	<b>58</b>	<b>68</b>	<b>71</b>
<b>Male teachers</b>	57	69	76	79	76
with subject qual	23	31	55	52	59
with subj and prof level	21	30	51	50	46
<b>% with subject qual</b>	<b>40</b>	<b>45</b>	<b>72</b>	<b>66</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>37</b>	<b>43</b>	<b>67</b>	<b>63</b>	<b>61</b>
<b>Eden &amp; Karoo teachers</b>	78	67	55	71	66
with subject qual	39	33	38	45	48
with subj and prof level	34	29	34	39	44
<b>% with subject qual</b>	<b>50</b>	<b>49</b>	<b>69</b>	<b>63</b>	<b>73</b>
<b>% with subj and prof level</b>	<b>44</b>	<b>43</b>	<b>62</b>	<b>55</b>	<b>67</b>
<b>Metro East teachers</b>	68	67	59	107	90
with subject qual	32	40	41	80	79
with subj and prof level	31	37	39	78	59
<b>% with subject qual</b>	<b>47</b>	<b>60</b>	<b>69</b>	<b>75</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>46</b>	<b>55</b>	<b>66</b>	<b>73</b>	<b>66</b>
<b>Section 21 school teachers</b>	<b>112</b>	<b>99</b>	<b>86</b>	<b>124</b>	<b>116</b>
with subject qual	55	53	57	87	91
with subj and prof level	51	47	52	81	80
<b>% with subject qual</b>	<b>49</b>	<b>54</b>	<b>66</b>	<b>70</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>46</b>	<b>47</b>	<b>60</b>	<b>65</b>	<b>69</b>
<b>Non-Section 21 school teachers</b>	<b>34</b>	<b>35</b>	<b>28</b>	<b>54</b>	<b>40</b>
with subject qual	16	20	22	38	36
with subj and prof level	14	19	21	36	23
<b>% with subject qual</b>	<b>47</b>	<b>57</b>	<b>79</b>	<b>70</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>41</b>	<b>54</b>	<b>75</b>	<b>67</b>	<b>58</b>

**Table 6.20: GET learning area counts and % profiles – Mathematics (contd)**

GRADE	Mathematics				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Teachers in <b>no-fee</b> schools	75	66	59	71	56
with subject qual	37	34	40	52	50
with subj and prof level	33	30	36	48	40
<b>% with subject qual</b>	<b>49</b>	<b>52</b>	<b>68</b>	<b>73</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>44</b>	<b>45</b>	<b>61</b>	<b>68</b>	<b>71</b>
Teachers in schools <b>with fees</b>	71	68	55	107	100
with subject qual	34	39	39	73	77
with subj and prof level	32	36	37	69	63
<b>% with subject qual</b>	<b>48</b>	<b>57</b>	<b>71</b>	<b>68</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>53</b>	<b>67</b>	<b>64</b>	<b>63</b>
Teachers in <b>quintile 5</b> schools	47	47	35	80	80
with subject qual	24	29	24	58	63
with subj and prof level	23	27	23	57	50
<b>% with subject qual</b>	<b>51</b>	<b>62</b>	<b>69</b>	<b>73</b>	<b>79</b>
<b>% with subj and prof level</b>	<b>49</b>	<b>57</b>	<b>66</b>	<b>71</b>	<b>63</b>
Teachers in <b>non-quintile 5</b> schools	99	87	79	98	76
with subject qual	47	44	55	67	64
with subj and prof level	42	39	50	60	53
<b>% with subject qual</b>	<b>47</b>	<b>51</b>	<b>70</b>	<b>68</b>	<b>84</b>
<b>% with subj and prof level</b>	<b>42</b>	<b>45</b>	<b>63</b>	<b>61</b>	<b>70</b>

**Table 6.21: GET learning area counts and % profiles – Life Orientation**

GRADE	Life Orientation				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	82	150	150	66	76
Number of teachers teaching	132	124	113	135	125
Number of classes with teachers	640	288	248	331	434
Teachers' class size not reported	3	1	0	5	4
Teachers' average age (yrs)	44	44	44	42	42
Reported no. learners with teachers	11176	9813	9366	12493	14033
with subject qual	5304	5163	4269	6405	8344
with subj and prof level	4391	4201	3666	6074	7409
<b>% with subject qual</b>	<b>47</b>	<b>53</b>	<b>46</b>	<b>51</b>	<b>59</b>
<b>% with subj and prof level</b>	<b>39</b>	<b>43</b>	<b>39</b>	<b>49</b>	<b>53</b>
<b>Teachers</b>	132	124	113	135	125
with subject qual	58	60	53	69	79
with subj and prof level	51	50	47	66	68
<b>% with subject qual</b>	<b>44</b>	<b>48</b>	<b>47</b>	<b>51</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>39</b>	<b>40</b>	<b>42</b>	<b>49</b>	<b>54</b>
<b>Female teachers</b>	72	73	53	69	76
with subject qual	30	30	22	33	48
with subj and prof level	26	26	19	32	41
<b>% with subject qual</b>	<b>42</b>	<b>41</b>	<b>42</b>	<b>48</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>36</b>	<b>36</b>	<b>36</b>	<b>46</b>	<b>54</b>
<b>Male teachers</b>	60	51	60	66	49
with subject qual	28	30	31	36	31
with subj and prof level	25	24	28	34	27
<b>% with subject qual</b>	<b>47</b>	<b>59</b>	<b>52</b>	<b>55</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>42</b>	<b>47</b>	<b>47</b>	<b>52</b>	<b>55</b>
<b>Eden &amp; Karoo teachers</b>	75	63	58	58	51
with subject qual	38	33	30	33	36
with subj and prof level	31	25	26	31	30
<b>% with subject qual</b>	<b>51</b>	<b>52</b>	<b>52</b>	<b>57</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>41</b>	<b>40</b>	<b>45</b>	<b>53</b>	<b>59</b>
<b>Metro East teachers</b>	57	61	55	77	74
with subject qual	20	27	23	36	43
with subj and prof level	20	25	21	35	38
<b>% with subject qual</b>	<b>35</b>	<b>44</b>	<b>42</b>	<b>47</b>	<b>58</b>
<b>% with subj and prof level</b>	<b>35</b>	<b>41</b>	<b>38</b>	<b>45</b>	<b>51</b>
<b>Section 21 school teachers</b>	98	90	82	96	81
with subject qual	50	51	44	53	54
with subj and prof level	44	42	39	51	47
<b>% with subject qual</b>	<b>51</b>	<b>57</b>	<b>54</b>	<b>55</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>47</b>	<b>48</b>	<b>53</b>	<b>58</b>
<b>Non-Section 21 school teachers</b>	34	34	31	39	44
with subject qual	8	9	9	16	25
with subj and prof level	7	8	8	15	21
<b>% with subject qual</b>	<b>24</b>	<b>26</b>	<b>29</b>	<b>41</b>	<b>57</b>
<b>% with subj and prof level</b>	<b>21</b>	<b>24</b>	<b>26</b>	<b>38</b>	<b>48</b>

**Table 6.21: GET learning area counts and % profiles – Life Orientation (contd)**

GRADE	Life Orientation				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Teachers in <b>no-fee</b> schools	73	60	55	51	47
with subject qual	32	25	20	27	27
with subj and prof level	27	18	17	24	24
<b>% with subject qual</b>	<b>44</b>	<b>42</b>	<b>36</b>	<b>53</b>	<b>57</b>
<b>% with subj and prof level</b>	<b>37</b>	<b>30</b>	<b>31</b>	<b>47</b>	<b>51</b>
Teachers in schools <b>with fees</b>	59	64	58	84	78
with subject qual	26	35	33	42	52
with subj and prof level	24	32	30	42	44
<b>% with subject qual</b>	<b>44</b>	<b>55</b>	<b>57</b>	<b>50</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>41</b>	<b>50</b>	<b>52</b>	<b>50</b>	<b>56</b>
Teachers in <b>quintile 5</b> schools	40	44	41	58	57
with subject qual	18	23	23	31	38
with subj and prof level	18	22	21	31	33
<b>% with subject qual</b>	<b>45</b>	<b>52</b>	<b>56</b>	<b>53</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>50</b>	<b>51</b>	<b>53</b>	<b>58</b>
Teachers in <b>non-quintile 5</b> schools	92	80	72	77	68
with subject qual	40	37	30	38	41
with subj and prof level	33	28	26	35	35
<b>% with subject qual</b>	<b>43</b>	<b>46</b>	<b>42</b>	<b>49</b>	<b>60</b>
<b>% with subj and prof level</b>	<b>36</b>	<b>35</b>	<b>36</b>	<b>45</b>	<b>51</b>

**Table 6.22: GET learning area counts and % profiles – Natural Sciences**

GRADE	Natural Sciences				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	84	80	67	70	59
Number of teachers teaching	122	117	105	139	145
Number of classes with teachers	640	254	253	324	368
Teachers' class size not reported	3	2	1	1	1
Teachers' average age (yrs)	42	43	44	42	42
Reported no. learners with teachers	11066	9821	10253	13087	14799
with subject qual	7052	5016	6278	11247	12581
with subj and prof level	6349	4647	5185	10360	10328
<b>% with subject qual</b>	<b>64</b>	<b>51</b>	<b>61</b>	<b>86</b>	<b>85</b>
<b>% with subj and prof level</b>	<b>57</b>	<b>47</b>	<b>51</b>	<b>79</b>	<b>70</b>
<b>Teachers</b>	122	117	105	139	145
with subject qual	69	59	63	119	122
with subj and prof level	63	54	52	111	102
<b>% with subject qual</b>	<b>57</b>	<b>50</b>	<b>60</b>	<b>86</b>	<b>84</b>
<b>% with subj and prof level</b>	<b>52</b>	<b>46</b>	<b>50</b>	<b>80</b>	<b>70</b>
<b>Female teachers</b>	68	62	43	72	72
with subject qual	36	32	23	60	62
with subj and prof level	32	30	18	57	55
<b>% with subject qual</b>	<b>53</b>	<b>52</b>	<b>53</b>	<b>83</b>	<b>86</b>
<b>% with subj and prof level</b>	<b>47</b>	<b>48</b>	<b>42</b>	<b>79</b>	<b>76</b>
<b>Male teachers</b>	54	55	62	67	73
with subject qual	33	27	40	59	60
with subj and prof level	31	24	34	54	47
<b>% with subject qual</b>	<b>61</b>	<b>49</b>	<b>65</b>	<b>88</b>	<b>82</b>
<b>% with subj and prof level</b>	<b>57</b>	<b>44</b>	<b>55</b>	<b>81</b>	<b>64</b>
<b>Eden &amp; Karoo teachers</b>	63	63	49	63	60
with subject qual	35	35	35	55	50
with subj and prof level	31	32	30	48	39
<b>% with subject qual</b>	<b>56</b>	<b>56</b>	<b>71</b>	<b>87</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>49</b>	<b>51</b>	<b>61</b>	<b>76</b>	<b>65</b>
<b>Metro East teachers</b>	59	54	56	76	85
with subject qual	34	24	28	64	72
with subj and prof level	32	22	22	63	63
<b>% with subject qual</b>	<b>58</b>	<b>44</b>	<b>50</b>	<b>84</b>	<b>85</b>
<b>% with subj and prof level</b>	<b>54</b>	<b>41</b>	<b>39</b>	<b>83</b>	<b>74</b>
<b>Section 21 school teachers</b>	93	91	73	102	103
with subject qual	48	45	46	88	90
with subj and prof level	44	40	38	81	78
<b>% with subject qual</b>	<b>52</b>	<b>49</b>	<b>63</b>	<b>86</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>47</b>	<b>44</b>	<b>52</b>	<b>79</b>	<b>76</b>
<b>Non-Section 21 school teachers</b>	29	26	32	37	42
with subject qual	21	14	17	31	32
with subj and prof level	19	14	14	30	24
<b>% with subject qual</b>	<b>72</b>	<b>54</b>	<b>53</b>	<b>84</b>	<b>76</b>
<b>% with subj and prof level</b>	<b>66</b>	<b>54</b>	<b>44</b>	<b>81</b>	<b>57</b>

**Table 6.22: GET learning area counts and % profiles – Natural Sciences (contd)**

GRADE	Natural Sciences				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Teachers in <b>no-fee</b> schools	68	66	60	55	58
with subject qual	37	34	34	48	45
with subj and prof level	33	31	30	45	36
<b>% with subject qual</b>	<b>54</b>	<b>52</b>	<b>57</b>	<b>87</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>49</b>	<b>47</b>	<b>50</b>	<b>82</b>	<b>62</b>
Teachers in schools <b>with fees</b>	54	51	45	84	87
with subject qual	32	25	29	71	77
with subj and prof level	30	23	22	66	66
<b>% with subject qual</b>	<b>59</b>	<b>49</b>	<b>64</b>	<b>85</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>56</b>	<b>45</b>	<b>49</b>	<b>79</b>	<b>76</b>
Teachers in <b>quintile 5</b> schools	37	35	30	64	70
with subject qual	22	18	18	55	63
with subj and prof level	22	16	14	52	55
<b>% with subject qual</b>	<b>59</b>	<b>51</b>	<b>60</b>	<b>86</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>59</b>	<b>46</b>	<b>47</b>	<b>81</b>	<b>79</b>
Teachers in <b>non-quintile 5</b> schools	85	82	75	75	75
with subject qual	47	41	45	64	59
with subj and prof level	41	38	38	59	47
<b>% with subject qual</b>	<b>55</b>	<b>50</b>	<b>60</b>	<b>85</b>	<b>79</b>
<b>% with subj and prof level</b>	<b>48</b>	<b>46</b>	<b>51</b>	<b>79</b>	<b>63</b>

**Table 6.23: GET learning area counts and % profiles – Social Sciences**

GRADE	Social Sciences					History					Geography				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	70	62	51	52	20	21	20	38	39	19	20	35	37	77	79
Number of teachers teaching	92	87	70	78	73	32	23	26	57	60	30	24	25	47	49
Number of classes with teachers	623	273	168	200	228	78	58	60	170	189	337	58	64	128	152
Teachers' class size not reported	3	1	0	0	0	1	1	1	0	0	1	0	0	1	1
Teachers' average age (yrs)	43	44	42	43	44	45	45	45	45	45	49	45	46	42	43
Reported no. learners with teachers	8164	9155	6740	8345	9824	2959	2491	2200	6974	7980	2908	2417	2320	5178	5873
with subject qual	4737	4733	4493	6165	8025	1778	1811	1620	6411	7127	2094	1643	1842	4789	5051
with subj and prof level	4370	4333	4147	5847	6486	1407	1546	1620	5591	5853	1663	1490	1540	4630	3689
% with subject qual	58	52	67	74	82	60	73	74	92	89	72	68	79	92	86
% with subj and prof level	54	47	62	70	66	48	62	74	80	73	57	62	66	89	63
Teachers	92	87	70	78	73	32	23	26	57	60	30	24	25	47	49
with subject qual	50	55	46	59	59	20	16	18	51	55	22	16	18	42	42
with subj and prof level	46	48	42	57	50	18	14	18	47	47	19	15	16	40	32
% with subject qual	54	63	66	76	81	63	70	69	89	92	73	67	72	89	86
% with subj and prof level	50	55	60	73	68	56	61	69	82	78	63	63	64	85	65
Female teachers	50	36	22	37	28	17	10	6	23	26	16	12	7	16	16
with subject qual	22	18	12	23	19	9	9	5	20	23	11	8	4	13	10
with subj and prof level	20	14	11	22	16	8	8	5	18	18	9	7	4	12	8
% with subject qual	44	50	55	62	68	53	90	83	87	88	69	67	57	81	63
% with subj and prof level	40	39	50	59	57	47	80	83	78	69	56	58	57	75	50
Male teachers	42	51	48	41	45	15	13	20	34	34	14	12	18	31	33
with subject qual	28	37	34	36	40	11	7	13	31	32	11	8	14	29	32
with subj and prof level	26	34	31	35	34	10	6	13	29	29	10	8	12	28	24
% with subject qual	67	73	71	88	89	73	54	65	91	94	79	67	78	94	97
% with subj and prof level	62	67	65	85	76	67	46	65	85	85	71	67	67	90	73
Eden & Karoo teachers	47	46	37	35	31	15	11	16	26	28	13	10	15	21	24
with subject qual	25	29	22	22	22	9	9	11	23	24	10	8	10	19	21
with subj and prof level	23	23	18	20	17	8	8	11	19	19	8	8	8	17	13
% with subject qual	53	63	59	63	71	60	82	69	88	86	77	80	67	90	88
% with subj and prof level	49	50	49	57	55	53	73	69	73	68	62	80	53	81	54
Metro East teachers	45	41	33	43	42	17	12	10	31	32	17	14	10	26	25
with subject qual	25	26	24	37	37	11	7	7	28	31	12	8	8	23	21

**Table 6.23: GET learning area counts and % profiles – Social Sciences (contd)**

GRADE	Social Sciences					History					Geography				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
with subj and prof level	23	25	24	37	33	10	6	7	28	28	11	7	8	23	19
<b>% with subject qual</b>	<b>56</b>	<b>63</b>	<b>73</b>	<b>86</b>	<b>88</b>	<b>65</b>	<b>58</b>	<b>70</b>	<b>90</b>	<b>97</b>	<b>71</b>	<b>57</b>	<b>80</b>	<b>88</b>	<b>84</b>
<b>% with subj and prof level</b>	<b>51</b>	<b>61</b>	<b>73</b>	<b>86</b>	<b>79</b>	<b>59</b>	<b>50</b>	<b>70</b>	<b>90</b>	<b>88</b>	<b>65</b>	<b>50</b>	<b>80</b>	<b>88</b>	<b>76</b>
<b>Section 21</b> school teachers	65	67	57	62	51	25	18	20	38	40	24	16	19	29	37
with subject qual	31	39	35	45	39	18	14	16	34	35	17	10	13	26	33
with subj and prof level	29	32	31	43	35	16	12	16	30	29	14	9	11	24	24
<b>% with subject qual</b>	<b>48</b>	<b>58</b>	<b>61</b>	<b>73</b>	<b>76</b>	<b>72</b>	<b>78</b>	<b>80</b>	<b>89</b>	<b>88</b>	<b>71</b>	<b>63</b>	<b>68</b>	<b>90</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>48</b>	<b>54</b>	<b>69</b>	<b>69</b>	<b>64</b>	<b>67</b>	<b>80</b>	<b>79</b>	<b>73</b>	<b>58</b>	<b>56</b>	<b>58</b>	<b>83</b>	<b>65</b>
<b>Non-Section 21</b> school teachers	27	20	13	16	22	7	5	6	19	20	6	8	6	18	12
with subject qual	19	16	11	14	20	2	2	2	17	20	5	6	5	16	9
with subj and prof level	17	16	11	14	15	2	2	2	17	18	5	6	5	16	8
<b>% with subject qual</b>	<b>70</b>	<b>80</b>	<b>85</b>	<b>88</b>	<b>91</b>	<b>29</b>	<b>40</b>	<b>33</b>	<b>89</b>	<b>100</b>	<b>83</b>	<b>75</b>	<b>83</b>	<b>89</b>	<b>75</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>80</b>	<b>85</b>	<b>88</b>	<b>68</b>	<b>29</b>	<b>40</b>	<b>33</b>	<b>89</b>	<b>90</b>	<b>83</b>	<b>75</b>	<b>83</b>	<b>89</b>	<b>67</b>
Teachers in <b>no-fee</b> schools	54	52	38	33	32	11	12	12	23	24	12	9	9	14	17
with subject qual	31	32	27	22	25	5	8	8	20	21	8	5	6	14	15
with subj and prof level	28	25	24	20	18	4	7	8	17	18	6	5	4	13	11
<b>% with subject qual</b>	<b>57</b>	<b>62</b>	<b>71</b>	<b>67</b>	<b>78</b>	<b>45</b>	<b>67</b>	<b>67</b>	<b>87</b>	<b>88</b>	<b>67</b>	<b>56</b>	<b>67</b>	<b>100</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>52</b>	<b>48</b>	<b>63</b>	<b>61</b>	<b>56</b>	<b>36</b>	<b>58</b>	<b>67</b>	<b>74</b>	<b>75</b>	<b>50</b>	<b>56</b>	<b>44</b>	<b>93</b>	<b>65</b>
Teachers in schools <b>with fees</b>	38	35	32	45	41	21	11	14	34	36	18	15	16	33	32
with subject qual	19	23	19	37	34	15	8	10	31	34	14	11	12	28	27
with subj and prof level	18	23	18	37	32	14	7	10	30	29	13	10	12	27	21
<b>% with subject qual</b>	<b>50</b>	<b>66</b>	<b>59</b>	<b>82</b>	<b>83</b>	<b>71</b>	<b>73</b>	<b>71</b>	<b>91</b>	<b>94</b>	<b>78</b>	<b>73</b>	<b>75</b>	<b>85</b>	<b>84</b>
<b>% with subj and prof level</b>	<b>47</b>	<b>66</b>	<b>56</b>	<b>82</b>	<b>78</b>	<b>67</b>	<b>64</b>	<b>71</b>	<b>88</b>	<b>81</b>	<b>72</b>	<b>67</b>	<b>75</b>	<b>82</b>	<b>66</b>
Teachers in <b>quintile 5</b> schools	24	24	20	36	32	14	8	10	23	25	15	11	12	23	19
with subject qual	12	14	11	32	29	10	6	7	21	25	11	8	9	19	17
with subj and prof level	12	14	11	32	27	9	5	7	21	20	10	7	9	19	12
<b>% with subject qual</b>	<b>50</b>	<b>58</b>	<b>55</b>	<b>89</b>	<b>91</b>	<b>71</b>	<b>75</b>	<b>70</b>	<b>91</b>	<b>100</b>	<b>73</b>	<b>73</b>	<b>75</b>	<b>83</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>58</b>	<b>55</b>	<b>89</b>	<b>84</b>	<b>64</b>	<b>63</b>	<b>70</b>	<b>91</b>	<b>80</b>	<b>67</b>	<b>64</b>	<b>75</b>	<b>83</b>	<b>63</b>
Teachers in <b>non-quintile 5</b> schools	68	63	50	42	41	18	15	16	34	35	15	13	13	24	30
with subject qual	38	41	35	27	30	10	10	11	30	30	11	8	9	23	25
with subj and prof level	34	34	31	25	23	9	9	11	26	27	9	8	7	21	20
<b>% with subject qual</b>	<b>56</b>	<b>65</b>	<b>70</b>	<b>64</b>	<b>73</b>	<b>56</b>	<b>67</b>	<b>69</b>	<b>88</b>	<b>86</b>	<b>73</b>	<b>62</b>	<b>69</b>	<b>96</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>54</b>	<b>62</b>	<b>60</b>	<b>56</b>	<b>50</b>	<b>60</b>	<b>69</b>	<b>76</b>	<b>77</b>	<b>60</b>	<b>62</b>	<b>54</b>	<b>88</b>	<b>67</b>

**Table 6.24: GET learning area counts and % profiles – Technology**

GRADE	Technology				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	76	69	64	72	80
Number of teachers teaching	100	97	89	105	112
Number of classes with teachers	515	246	238	316	348
Teachers' class size not reported	1	0	0	2	1
Teachers' average age (yrs)	42	43	43	42	41
Reported no. learners with teachers	9765	9824	9412	12475	14360
with subject qual	3042	4229	3957	8607	8864
with subj and prof level	2218	3535	3606	7345	5395
<b>% with subject qual</b>	<b>31</b>	<b>43</b>	<b>42</b>	<b>69</b>	<b>62</b>
<b>% with subj and prof level</b>	<b>23</b>	<b>36</b>	<b>38</b>	<b>59</b>	<b>38</b>
<b>Teachers</b>	100	97	89	105	112
with subject qual	29	36	34	70	70
with subj and prof level	22	29	30	60	41
<b>% with subject qual</b>	<b>29</b>	<b>37</b>	<b>38</b>	<b>67</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>22</b>	<b>30</b>	<b>34</b>	<b>57</b>	<b>37</b>
<b>Female teachers</b>	54	46	29	43	46
with subject qual	15	12	11	29	32
with subj and prof level	12	10	10	27	19
<b>% with subject qual</b>	<b>28</b>	<b>26</b>	<b>38</b>	<b>67</b>	<b>70</b>
<b>% with subj and prof level</b>	<b>22</b>	<b>22</b>	<b>34</b>	<b>63</b>	<b>41</b>
<b>Male teachers</b>	46	51	60	62	66
with subject qual	14	24	23	41	38
with subj and prof level	10	19	20	33	22
<b>% with subject qual</b>	<b>30</b>	<b>47</b>	<b>38</b>	<b>66</b>	<b>58</b>
<b>% with subj and prof level</b>	<b>22</b>	<b>37</b>	<b>33</b>	<b>53</b>	<b>33</b>
<b>Eden &amp; Karoo teachers</b>	59	53	47	44	50
with subject qual	19	22	19	29	31
with subj and prof level	13	17	17	23	18
<b>% with subject qual</b>	<b>32</b>	<b>42</b>	<b>40</b>	<b>66</b>	<b>62</b>
<b>% with subj and prof level</b>	<b>22</b>	<b>32</b>	<b>36</b>	<b>52</b>	<b>36</b>
<b>Metro East teachers</b>	41	44	42	61	62
with subject qual	10	14	15	41	39
with subj and prof level	9	12	13	37	23
<b>% with subject qual</b>	<b>24</b>	<b>32</b>	<b>36</b>	<b>67</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>22</b>	<b>27</b>	<b>31</b>	<b>61</b>	<b>37</b>
<b>Section 21 school teachers</b>	72	74	67	75	78
with subject qual	24	30	28	51	49
with subj and prof level	18	24	24	44	29
<b>% with subject qual</b>	<b>33</b>	<b>41</b>	<b>42</b>	<b>68</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>25</b>	<b>32</b>	<b>36</b>	<b>59</b>	<b>37</b>
<b>Non-Section 21 school teachers</b>	28	23	22	30	34
with subject qual	5	6	6	19	21
with subj and prof level	4	5	6	16	12
<b>% with subject qual</b>	<b>18</b>	<b>26</b>	<b>27</b>	<b>63</b>	<b>62</b>
<b>% with subj and prof level</b>	<b>14</b>	<b>22</b>	<b>27</b>	<b>53</b>	<b>35</b>

**Table 6.24: GET learning area counts and % profiles – Technology (contd)**

GRADE	Technology				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Teachers in <b>no-fee</b> schools	58	51	51	43	46
with subject qual	15	18	21	27	23
with subj and prof level	13	17	18	25	16
<b>% with subject qual</b>	<b>26</b>	<b>35</b>	<b>41</b>	<b>63</b>	<b>50</b>
<b>% with subj and prof level</b>	<b>22</b>	<b>33</b>	<b>35</b>	<b>58</b>	<b>35</b>
Teachers in schools <b>with fees</b>	42	46	38	62	66
with subject qual	14	18	13	43	47
with subj and prof level	9	12	12	35	25
<b>% with subject qual</b>	<b>33</b>	<b>39</b>	<b>34</b>	<b>69</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>21</b>	<b>26</b>	<b>32</b>	<b>56</b>	<b>38</b>
Teachers in <b>quintile 5</b> schools	24	28	25	49	50
with subject qual	8	11	9	37	40
with subj and prof level	8	9	9	31	21
<b>% with subject qual</b>	<b>33</b>	<b>39</b>	<b>36</b>	<b>76</b>	<b>80</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>32</b>	<b>36</b>	<b>63</b>	<b>42</b>
Teachers in <b>non-quintile 5</b> schools	76	69	64	56	62
with subject qual	21	25	25	33	30
with subj and prof level	14	20	21	29	20
<b>% with subject qual</b>	<b>28</b>	<b>36</b>	<b>39</b>	<b>59</b>	<b>48</b>
<b>% with subj and prof level</b>	<b>18</b>	<b>29</b>	<b>33</b>	<b>52</b>	<b>32</b>

**Table 6.25: GET learning area counts and % profiles – Economic and Management Sciences**

	<b>Economic and Management Sciences</b>				
<b>GRADE</b>	<b>Gr 5</b>	<b>Gr 6</b>	<b>Gr 7</b>	<b>Gr 8</b>	<b>Gr 9</b>
Number of schools with Grade	76	68	65	72	80
Number of teachers teaching	112	108	97	136	122
Number of classes with teachers	614	392	218	507	339
Teachers' class size not reported	3	3	2	2	1
Teachers' average age (yrs)	44	43	44	42	42
<b>Reported no. learners with teachers</b>	<b>10833</b>	<b>10249</b>	<b>8452</b>	<b>12239</b>	<b>13705</b>
with subject qual	1451	2195	1244	10213	12085
with subj and prof level	1371	2109	1005	10141	7396
<b>% with subject qual</b>	<b>13</b>	<b>21</b>	<b>15</b>	<b>83</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>13</b>	<b>21</b>	<b>12</b>	<b>83</b>	<b>54</b>
<b>Teachers</b>	<b>112</b>	<b>108</b>	<b>97</b>	<b>136</b>	<b>122</b>
with subject qual	14	20	16	116	109
with subj and prof level	13	19	13	113	75
<b>% with subject qual</b>	<b>13</b>	<b>19</b>	<b>16</b>	<b>85</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>12</b>	<b>18</b>	<b>13</b>	<b>83</b>	<b>61</b>
<b>Female teachers</b>	<b>67</b>	<b>48</b>	<b>37</b>	<b>84</b>	<b>83</b>
with subject qual	7	8	4	71	74
with subj and prof level	7	8	4	70	52
<b>% with subject qual</b>	<b>10</b>	<b>17</b>	<b>11</b>	<b>85</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>10</b>	<b>17</b>	<b>11</b>	<b>83</b>	<b>63</b>
<b>Male teachers</b>	<b>45</b>	<b>60</b>	<b>60</b>	<b>52</b>	<b>39</b>
with subject qual	7	12	12	45	35
with subj and prof level	6	11	9	43	23
<b>% with subject qual</b>	<b>16</b>	<b>20</b>	<b>20</b>	<b>87</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>13</b>	<b>18</b>	<b>15</b>	<b>83</b>	<b>59</b>
<b>Eden &amp; Karoo teachers</b>	<b>57</b>	<b>56</b>	<b>48</b>	<b>53</b>	<b>48</b>
with subject qual	9	12	11	41	37
with subj and prof level	8	11	9	40	26
<b>% with subject qual</b>	<b>16</b>	<b>21</b>	<b>23</b>	<b>77</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>14</b>	<b>20</b>	<b>19</b>	<b>75</b>	<b>54</b>
<b>Metro East teachers</b>	<b>55</b>	<b>52</b>	<b>49</b>	<b>83</b>	<b>74</b>
with subject qual	5	8	5	75	72
with subj and prof level	5	8	4	73	49
<b>% with subject qual</b>	<b>9</b>	<b>15</b>	<b>10</b>	<b>90</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>9</b>	<b>15</b>	<b>8</b>	<b>88</b>	<b>66</b>
<b>Section 21 school teachers</b>	<b>80</b>	<b>77</b>	<b>71</b>	<b>99</b>	<b>84</b>
with subject qual	10	14	13	80	72
with subj and prof level	9	13	10	77	54
<b>% with subject qual</b>	<b>13</b>	<b>18</b>	<b>18</b>	<b>81</b>	<b>86</b>
<b>% with subj and prof level</b>	<b>11</b>	<b>17</b>	<b>14</b>	<b>78</b>	<b>64</b>
<b>Non-Section 21 school teachers</b>	<b>32</b>	<b>31</b>	<b>26</b>	<b>37</b>	<b>38</b>
with subject qual	4	6	3	36	37
with subj and prof level	4	6	3	36	21
<b>% with subject qual</b>	<b>13</b>	<b>19</b>	<b>12</b>	<b>97</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>13</b>	<b>19</b>	<b>12</b>	<b>97</b>	<b>55</b>

**Table 6.25: GET learning area counts and % profiles – Economic and Management Sciences (contd)**

GRADE	Economic and Management Sciences				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Teachers in <b>no-fee</b> schools	58	60	52	52	46
with subject qual	10	12	9	42	40
with subj and prof level	10	12	8	41	24
<b>% with subject qual</b>	<b>17</b>	<b>20</b>	<b>17</b>	<b>81</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>17</b>	<b>20</b>	<b>15</b>	<b>79</b>	<b>52</b>
Teachers in schools <b>with fees</b>	54	48	45	84	76
with subject qual	4	8	7	74	69
with subj and prof level	3	7	5	72	51
<b>% with subject qual</b>	<b>7</b>	<b>17</b>	<b>16</b>	<b>88</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>6</b>	<b>15</b>	<b>11</b>	<b>86</b>	<b>67</b>
Teachers in <b>quintile 5</b> schools	34	32	26	65	62
with subject qual	1	3	4	60	59
with subj and prof level	1	3	3	58	44
<b>% with subject qual</b>	<b>3</b>	<b>9</b>	<b>15</b>	<b>92</b>	<b>95</b>
<b>% with subj and prof level</b>	<b>3</b>	<b>9</b>	<b>12</b>	<b>89</b>	<b>71</b>
Teachers in <b>non-quintile 5</b> schools	78	76	71	71	60
with subject qual	13	17	12	56	50
with subj and prof level	12	16	10	55	31
<b>% with subject qual</b>	<b>17</b>	<b>22</b>	<b>17</b>	<b>79</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>15</b>	<b>21</b>	<b>14</b>	<b>77</b>	<b>52</b>

**Table 6.26: GET learning area counts and % profiles – Arts and Culture**

GRADE	Arts and Culture				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Number of schools with Grade	150	150	150		
Number of teachers teaching	112	103	100	133	130
Number of classes with teachers	799	313	325	342	630
Teachers' class size not reported	1	3	3	4	7
Teachers' average age (yrs)	43	44	46	43	42
Reported no. learners with teachers	10706	9624	10355	12291	13961
with subject qual	4796	4822	4797	5794	6968
with subj and prof level	3641	4210	4066	5132	5606
<b>% with subject qual</b>	<b>45</b>	<b>50</b>	<b>46</b>	<b>47</b>	<b>50</b>
<b>% with subj and prof level</b>	<b>34</b>	<b>44</b>	<b>39</b>	<b>42</b>	<b>40</b>
<b>Teachers</b>	112	103	100	133	130
with subject qual	43	43	44	65	72
with subj and prof level	33	37	36	57	56
<b>% with subject qual</b>	<b>38</b>	<b>42</b>	<b>44</b>	<b>49</b>	<b>55</b>
<b>% with subj and prof level</b>	<b>29</b>	<b>36</b>	<b>36</b>	<b>43</b>	<b>43</b>
<b>Female teachers</b>	64	62	55	82	86
with subject qual	27	31	23	42	48
with subj and prof level	20	27	18	38	37
<b>% with subject qual</b>	<b>42</b>	<b>50</b>	<b>42</b>	<b>51</b>	<b>56</b>
<b>% with subj and prof level</b>	<b>31</b>	<b>44</b>	<b>33</b>	<b>46</b>	<b>43</b>
<b>Male teachers</b>	48	41	45	51	44
with subject qual	16	12	21	23	24
with subj and prof level	13	10	18	19	19
<b>% with subject qual</b>	<b>33</b>	<b>29</b>	<b>47</b>	<b>45</b>	<b>55</b>
<b>% with subj and prof level</b>	<b>27</b>	<b>24</b>	<b>40</b>	<b>37</b>	<b>43</b>
<b>Eden &amp; Karoo teachers</b>	64	52	53	55	52
with subject qual	18	22	25	28	31
with subj and prof level	13	17	17	24	24
<b>% with subject qual</b>	<b>28</b>	<b>42</b>	<b>47</b>	<b>51</b>	<b>60</b>
<b>% with subj and prof level</b>	<b>20</b>	<b>33</b>	<b>32</b>	<b>44</b>	<b>46</b>
<b>Metro East teachers</b>	48	51	47	78	78
with subject qual	25	21	19	37	41
with subj and prof level	20	20	19	33	32
<b>% with subject qual</b>	<b>52</b>	<b>41</b>	<b>40</b>	<b>47</b>	<b>53</b>
<b>% with subj and prof level</b>	<b>42</b>	<b>39</b>	<b>40</b>	<b>42</b>	<b>41</b>
<b>Section 21 school teachers</b>	87	72	74	95	90
with subject qual	33	35	38	47	51
with subj and prof level	27	32	32	42	39
<b>% with subject qual</b>	<b>38</b>	<b>49</b>	<b>51</b>	<b>49</b>	<b>57</b>
<b>% with subj and prof level</b>	<b>31</b>	<b>44</b>	<b>43</b>	<b>44</b>	<b>43</b>
<b>Non-Section 21 school teachers</b>	25	31	26	38	40
with subject qual	10	8	6	18	21
with subj and prof level	6	5	4	15	17
<b>% with subject qual</b>	<b>40</b>	<b>26</b>	<b>23</b>	<b>47</b>	<b>53</b>
<b>% with subj and prof level</b>	<b>24</b>	<b>16</b>	<b>15</b>	<b>39</b>	<b>43</b>

**Table 6.26: GET learning area counts and % profiles – Arts and Culture (contd)**

GRADE	Arts and Culture				
	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9
Teachers in <b>no-fee</b> schools	63	52	55	51	54
with subject qual	16	16	18	21	28
with subj and prof level	12	13	15	18	23
<b>% with subject qual</b>	<b>25</b>	<b>31</b>	<b>33</b>	<b>41</b>	<b>52</b>
<b>% with subj and prof level</b>	<b>19</b>	<b>25</b>	<b>27</b>	<b>35</b>	<b>43</b>
Teachers in schools <b>with fees</b>	49	51	45	82	76
with subject qual	27	27	26	44	44
with subj and prof level	21	24	21	39	33
<b>% with subject qual</b>	<b>55</b>	<b>53</b>	<b>58</b>	<b>54</b>	<b>58</b>
<b>% with subj and prof level</b>	<b>43</b>	<b>47</b>	<b>47</b>	<b>48</b>	<b>43</b>
Teachers in <b>quintile 5</b> schools	30	32	27	65	63
with subject qual	18	19	19	39	37
with subj and prof level	15	17	17	35	27
<b>% with subject qual</b>	<b>60</b>	<b>59</b>	<b>70</b>	<b>60</b>	<b>59</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>53</b>	<b>63</b>	<b>54</b>	<b>43</b>
Teachers in <b>non-quintile 5</b> schools	82	71	73	68	67
with subject qual	25	24	25	26	35
with subj and prof level	18	20	19	22	29
<b>% with subject qual</b>	<b>30</b>	<b>34</b>	<b>34</b>	<b>38</b>	<b>52</b>
<b>% with subj and prof level</b>	<b>22</b>	<b>28</b>	<b>26</b>	<b>32</b>	<b>43</b>

If the tables are studied, what emerges is lower capacity in the Intermediate/Senior Phase or middle school years in certain curriculum areas. For example, data suggest that, in 2008, a relatively high proportion of:

- **Grades 5, 6 and 7** teachers taught *Economic and Management Sciences* without an acceptable subject specialisation and school level professional teaching qualifications for the grade level. This is the situation for *quintile 5* and *non-quintile 5* schools.
- **Grades 5, 6, 7 and 8** teachers taught *Arts and Culture* without an acceptable subject specialisation or school level professional teaching qualifications for the grade level suggesting that they do not have the relevant subject matter knowledge. The situation is most pronounced for *non-quintile 5* schools.
- **Grades 5, 6 and 7** teachers taught *Technology* without an acceptable subject specialisation and school level professional teaching qualifications for the grade level, and **Grades 8 and 9** teachers taught *Technology* without ‘acceptable’ school level professional qualifications for teaching the grade level. This is the situation for *quintile 5* and *non-quintile 5* schools.
- **Grades 5 and 6** teachers taught *Mathematics* without the subject specialisation or an appropriate school level professional teaching qualifications for the grade level. This is particularly significant as a great deal of research has substantiated the importance of teachers’ subject knowledge for teaching Mathematics.

- **Grades 5, 6 and 7** teachers taught *Natural Sciences* without an acceptable subject specialisation or school level professional teaching qualifications for the grade level. This is the situation for *quintile 5* schools and *non-quintile 5* schools. Research also supports the importance of teachers' subject knowledge of science for Science teaching.
- **Grades 5, 6, 7 and 8** teachers taught *Life Orientation* without an acceptable subject specialisation or school level professional teaching qualifications for the grade level. The lack of school level qualifications is slightly more evident for *non-quintile 5* schools.
- **Grade 5** learners were taught *Afrikaans First Additional* by teachers without acceptable school level professional teaching qualifications for the grade level, and **Grades 6 and 7** learners were taught Afrikaans First Additional by teachers without the subject specialisation or school level professional teaching qualifications for the grade level, and that this was the situation in schools that are *non-quintile 5* schools.
- **Grade 6** learners were taught *English Home Language* by teachers without acceptable school level professional teaching qualifications for the grade level. This is more evident in *non-quintile 5* and *non-Section 21* schools

### ***Conclusions***

According to the information on the preceding tables reduced capacity in subject expertise amongst teachers in the Intermediate/Senior Phase or middle school years is most evident for the 'newer' more integrated learning areas of Economic and Management Sciences and Arts and Culture.

Data also indicate that in the middle school years, learning areas such as Mathematics and Natural Sciences are being taught by teachers who are teaching at grade levels beyond their levels of subject expertise (for example, junior primary trained teachers teaching Intermediate or Senior Phase). The cumulative nature of these knowledge domains means that teacher underpreparedness at this school level may be contributing to cumulative deficits evident in, for example, learners' Mathematics achievement in later grades.

From the data analysis of the GET learning areas where teachers are teaching *within their field of expertise*, the following emerges regarding their subject specialisations:

- teachers teaching Natural Sciences more commonly have Biology than Physical Sciences
- teachers teaching Social Sciences more commonly have History than Geography
- teachers teaching Life Orientation most commonly have Bible Studies, before Psychology/Guidance and Counselling and Physical Education/Human Movement Studies

- teachers teaching Economics and Management Sciences more commonly have Accounting, Economics or Business Economics rather than Business Studies
- teachers teaching Technology more commonly have Technology (in general), Home Economics or Needlework and Dressmaking or Computer Literacy than Technical Drawing/Design, Metal/Woodwork, or Electrical or Mechanical Technology
- teachers teaching Arts and Culture most commonly have Music, then Art and Crafts, then Human Movement Studies rather than Fine Arts, Drama or Dance *per se*.

The above has implications for teacher in-service and upgrading programmes.

### **6.3.1.3 Grades 10-12: Further Education and Training**

Tables 6.27 - 6.56 show data emerging from the analysis of FET Grades 10-12 subjects using data from the EQ on teacher qualifications and teaching assignments as the source. The analysis focused on the FET subject grade levels taught by teachers *teaching in their subject field, with and without an appropriate level of professional teaching qualification* in 2008.

**Table 6.27: FET subject counts and % profiles – Afrikaans Home Language and First Additional Language**

GRADE	Afrikaans Home Lang			Afrikaans FAL		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Number of schools with Grade	38	39	40	23	19	17
Number of classes with teachers	243	274	321	74	57	82
with subject qual	232	161	242	57	51	79
with subj and prof level	181	134	211	37	38	28
Reported no. <b>learners</b> with teachers	7412	6171	4214	2625	1854	1100
with subject qual	7168	5915	4082	1969	1620	998
with subj and prof level	5583	4916	3412	1411	1216	853
Teachers' class size not reported	4	0	2	0	0	1
<b>Teachers</b>	99	84	75	41	38	28
with subject qual	94	80	71	34	34	27
with subj and prof level	75	67	59	23	26	22
<b>% with subject qual</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>83</b>	<b>89</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>80</b>	<b>79</b>	<b>56</b>	<b>68</b>	<b>79</b>
Teachers' average age (yrs)	45	46	46	44	45	48
<b>Female teachers</b>	65	53	51	32	32	24
with subject qual	63	49	48	26	29	23
with subj and prof level	53	41	39	17	21	18
<b>% with subject qual</b>	<b>97</b>	<b>92</b>	<b>94</b>	<b>81</b>	<b>91</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>82</b>	<b>77</b>	<b>76</b>	<b>53</b>	<b>66</b>	<b>75</b>
<b>Male teachers</b>	34	31	24	9	6	4
with subject qual	31	31	23	8	5	4
with subj and prof level	22	26	20	6	5	4
<b>% with subject qual</b>	<b>91</b>	<b>100</b>	<b>96</b>	<b>89</b>	<b>83</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>65</b>	<b>84</b>	<b>83</b>	<b>67</b>	<b>83</b>	<b>100</b>
<b>Eden &amp; Karoo teachers</b>	51	42	36	14	13	13
with subject qual	47	41	36	12	12	12
with subj and prof level	37	33	28	9	8	9
<b>% with subject qual</b>	<b>92</b>	<b>98</b>	<b>100</b>	<b>86</b>	<b>92</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>79</b>	<b>78</b>	<b>64</b>	<b>62</b>	<b>69</b>
<b>Metro East teachers</b>	48	42	39	27	25	15
with subject qual	47	39	35	22	22	15
with subj and prof level	38	34	31	14	18	13
<b>% with subject qual</b>	<b>98</b>	<b>93</b>	<b>90</b>	<b>81</b>	<b>88</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>79</b>	<b>81</b>	<b>79</b>	<b>52</b>	<b>72</b>	<b>87</b>
<b>Section 21 school teachers</b>	82	67	60	31	31	24
with subject qual	78	65	59	27	28	23
with subj and prof level	61	53	47	18	21	19
<b>% with subject qual</b>	<b>95</b>	<b>97</b>	<b>98</b>	<b>87</b>	<b>90</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>79</b>	<b>78</b>	<b>58</b>	<b>68</b>	<b>79</b>
<b>Non-Section 21 school teachers</b>	17	17	15	10	7	4
with subject qual	16	15	12	7	6	4
with subj and prof level	14	14	12	5	5	3
<b>% with subject qual</b>	<b>94</b>	<b>88</b>	<b>80</b>	<b>70</b>	<b>86</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>82</b>	<b>82</b>	<b>80</b>	<b>50</b>	<b>71</b>	<b>75</b>

**Table 6.27: FET subject counts and % profiles – Afrikaans Home Language and First Additional Language (contd)**

GRADE	Afrikaans Home Language			Afrikaans First Additional Language		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	24	21	16	6	5	5
with subject qual	22	19	14	4	5	5
with subj and prof level	17	15	11	4	4	4
<b>% with subject qual</b>	<b>92</b>	<b>90</b>	<b>88</b>	<b>67</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>71</b>	<b>69</b>	<b>67</b>	<b>80</b>	<b>80</b>
Teachers in schools <b>with fees</b>	75	63	59	35	33	23
with subject qual	72	61	57	30	29	22
with subj and prof level	58	52	48	19	22	18
<b>% with subject qual</b>	<b>96</b>	<b>97</b>	<b>97</b>	<b>86</b>	<b>88</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>77</b>	<b>83</b>	<b>81</b>	<b>54</b>	<b>67</b>	<b>78</b>
Teachers in <b>quintile 5</b> schools	62	54	51	31	31	20
with subject qual	61	52	49	27	27	19
with subj and prof level	50	45	42	18	21	16
<b>% with subject qual</b>	<b>98</b>	<b>96</b>	<b>96</b>	<b>87</b>	<b>87</b>	<b>95</b>
<b>% with subj and prof level</b>	<b>81</b>	<b>83</b>	<b>82</b>	<b>58</b>	<b>68</b>	<b>80</b>
Teachers in <b>non-quintile 5</b> schools	37	30	24	10	7	8
with subject qual	33	28	22	7	7	8
with subj and prof level	25	22	17	5	5	6
<b>% with subject qual</b>	<b>89</b>	<b>93</b>	<b>92</b>	<b>70</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>68</b>	<b>73</b>	<b>71</b>	<b>50</b>	<b>71</b>	<b>75</b>

**Table 6.28: FET subject counts and % profiles – English Home Language and First Additional Language**

GRADE	English Home Language			English FAL		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Number of schools with Grade	20	18	15	54	51	52
Number of classes with teachers	57	44	38	298	252	501
with subject qual	45	42	37	257	227	483
with subj and prof level	38	35	32	196	184	440
Reported no. <b>learners</b> with teachers	2007	1234	1091	11822	9793	7118
with subject qual	1529	1199	1072	10308	8773	6425
with subj and prof level	1305	996	944	7780	7153	4880
Teachers' class size not reported	0	1	1	2	0	1
<b>Teachers</b>	39	35	30	132	109	100
with subject qual	34	33	29	115	99	90
with subj and prof level	28	27	24	93	78	73
<b>% with subject qual</b>	<b>87</b>	<b>94</b>	<b>97</b>	<b>87</b>	<b>91</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>72</b>	<b>77</b>	<b>80</b>	<b>70</b>	<b>72</b>	<b>73</b>
Teachers' average age (yrs)	43	44	46	41	41	42
<b>Female teachers</b>	30	27	26	94	75	74
with subject qual	27	25	25	84	72	68
with subj and prof level	21	19	20	66	59	56
<b>% with subject qual</b>	<b>90</b>	<b>93</b>	<b>96</b>	<b>89</b>	<b>96</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>70</b>	<b>77</b>	<b>70</b>	<b>79</b>	<b>76</b>
<b>Male teachers</b>	9	8	4	38	34	26
with subject qual	7	8	4	31	27	22
with subj and prof level	7	8	4	27	19	17
<b>% with subject qual</b>	<b>78</b>	<b>100</b>	<b>100</b>	<b>82</b>	<b>79</b>	<b>85</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>100</b>	<b>100</b>	<b>71</b>	<b>56</b>	<b>65</b>
<b>Eden &amp; Karoo teachers</b>	12	12	12	50	38	36
with subject qual	11	11	11	41	35	32
with subj and prof level	8	8	7	31	26	23
<b>% with subject qual</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>82</b>	<b>92</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>67</b>	<b>58</b>	<b>62</b>	<b>68</b>	<b>64</b>
<b>Metro East teachers</b>	27	23	18	82	71	64
with subject qual	23	22	18	74	64	58
with subj and prof level	20	19	17	62	52	50
<b>% with subject qual</b>	<b>85</b>	<b>96</b>	<b>100</b>	<b>90</b>	<b>90</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>83</b>	<b>94</b>	<b>76</b>	<b>73</b>	<b>78</b>
<b>Section 21 school teachers</b>	31	29	29	81	63	60
with subject qual	29	28	28	72	59	55
with subj and prof level	23	22	23	56	45	41
<b>% with subject qual</b>	<b>94</b>	<b>97</b>	<b>97</b>	<b>89</b>	<b>94</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>76</b>	<b>79</b>	<b>69</b>	<b>71</b>	<b>68</b>
<b>Non-Section 21 school teachers</b>	8	6	1	51	46	40
with subject qual	5	5	1	43	40	35
with subj and prof level	5	5	1	37	33	32
<b>% with subject qual</b>	<b>63</b>	<b>83</b>	<b>100</b>	<b>84</b>	<b>87</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>83</b>	<b>100</b>	<b>73</b>	<b>72</b>	<b>80</b>

**Table 6.28: FET subject counts and % profiles – English Home Language and First Additional Language (contd)**

GRADE	English Home Language			English First Additional Language		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	2	0	0	61	51	46
with subject qual	1	0	0	50	47	40
with subj and prof level	1	0	0	41	35	31
<b>% with subject qual</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>92</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>69</b>	<b>67</b>
Teachers in schools <b>with fees</b>	37	35	30	71	58	54
with subject qual	33	33	29	65	52	50
with subj and prof level	27	27	24	52	43	42
<b>% with subject qual</b>	<b>89</b>	<b>94</b>	<b>97</b>	<b>92</b>	<b>90</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>77</b>	<b>80</b>	<b>73</b>	<b>74</b>	<b>78</b>
Teachers in <b>quintile 5</b> schools	37	35	29	60	49	47
with subject qual	33	33	29	56	45	44
with subj and prof level	27	27	24	47	37	37
<b>% with subject qual</b>	<b>89</b>	<b>94</b>	<b>100</b>	<b>93</b>	<b>92</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>77</b>	<b>83</b>	<b>78</b>	<b>76</b>	<b>79</b>
Teachers in <b>non-quintile 5</b> schools	2	0	1	72	60	53
with subject qual	1	0	0	59	54	46
with subj and prof level	1	0	0	46	41	36
<b>% with subject qual</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>90</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>68</b>	<b>68</b>

**Table 6.29: FET subject counts and % profiles – isiXhosa Home Language and First Additional Language**

GRADE	isiXhosa Home Lang			isiXhosa FAL		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Number of schools with Grade	21	21	17	5	3	3
Number of classes with teachers	125	122	79	9	6	9
with subject qual	119	121	76	9	6	9
with subj and prof level	99	107	58	7	6	5
Reported no. <b>learners</b> with teachers	5568	4153	2675	403	265	243
with subject qual	5282	4152	2575	403	265	243
with subj and prof level	4326	3435	2071	333	265	93
Teachers' class size not reported	1	2	0	0	0	0
<b>Teachers</b>	46	42	30	5	3	3
with subject qual	43	41	29	5	3	3
with subj and prof level	35	36	23	4	3	2
<b>% with subject qual</b>	<b>93</b>	<b>98</b>	<b>97</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>86</b>	<b>77</b>	<b>80</b>	<b>100</b>	<b>67</b>
Teachers' average age (yrs)	41	40	42	42	42	46
<b>Female teachers</b>	30	30	22	3	1	1
with subject qual	28	30	21	3	1	1
with subj and prof level	24	28	17	2	1	1
<b>% with subject qual</b>	<b>93</b>	<b>100</b>	<b>95</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>93</b>	<b>77</b>	<b>67</b>	<b>100</b>	<b>100</b>
<b>Male teachers</b>	16	12	8	2	2	2
with subject qual	15	11	8	2	2	2
with subj and prof level	11	8	6	2	2	1
<b>% with subject qual</b>	<b>94</b>	<b>92</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>69</b>	<b>67</b>	<b>75</b>	<b>100</b>	<b>100</b>	<b>50</b>
<b>Eden &amp; Karoo teachers</b>	7	7	4	1	0	1
with subject qual	6	7	4	1	0	1
with subj and prof level	4	5	2	1	0	1
<b>% with subject qual</b>	<b>86</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>57</b>	<b>71</b>	<b>50</b>	<b>100</b>	<b>0</b>	<b>100</b>
<b>Metro East teachers</b>	39	35	26	4	3	2
with subject qual	37	34	25	4	3	2
with subj and prof level	31	31	21	3	3	1
<b>% with subject qual</b>	<b>95</b>	<b>97</b>	<b>96</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>79</b>	<b>89</b>	<b>81</b>	<b>75</b>	<b>100</b>	<b>50</b>
<b>Section 21 school teachers</b>	8	9	6	2	1	2
with subject qual	7	9	6	2	1	2
with subj and prof level	5	7	3	2	1	2
<b>% with subject qual</b>	<b>88</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>78</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Non-Section 21 school teachers</b>	38	33	24	3	2	1
with subject qual	36	32	23	3	2	1
with subj and prof level	30	29	20	2	2	0
<b>% with subject qual</b>	<b>95</b>	<b>97</b>	<b>96</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>79</b>	<b>88</b>	<b>83</b>	<b>67</b>	<b>100</b>	<b>0</b>

**Table 6.29: FET subject counts and % profiles – isiXhosa Home Language and First Additional Language (contd)**

GRADE	isiXhosa Home Language			isiXhosa First Additional Language		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	44	41	29	4	2	2
with subject qual	42	40	28	4	2	2
with subj and prof level	35	36	23	3	2	1
<b>% with subject qual</b>	<b>95</b>	<b>98</b>	<b>97</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>88</b>	<b>79</b>	<b>75</b>	<b>100</b>	<b>50</b>
Teachers in schools <b>with fees</b>	2	1	1	1	1	1
with subject qual	1	1	1	1	1	1
with subj and prof level	0	0	0	1	1	1
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>
Teachers in <b>quintile 5</b> schools	0	0	0	1	1	1
with subject qual	0	0	0	1	1	1
with subj and prof level	0	0	0	1	1	1
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>
Teachers in <b>non-quintile 5</b> schools	46	42	30	4	2	2
with subject qual	43	41	29	4	2	2
with subj and prof level	35	36	23	3	2	1
<b>% with subject qual</b>	<b>93</b>	<b>98</b>	<b>97</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>86</b>	<b>77</b>	<b>75</b>	<b>100</b>	<b>50</b>

**Table 6.30: FET subject counts and % profiles – Accounting**

	<b>Accounting</b>		
<b>GRADE</b>	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	53	54	51
Number of classes with teachers	130	132	114
with subject qual	116	122	104
with subj and prof level	110	115	101
Reported no. <b>learners</b> with teachers	4448	3949	2382
with subject qual	4057	3697	2154
with subj and prof level	3886	3460	2075
Teachers' class size not reported	0	0	1
<b>Teachers</b>	81	78	67
with subject qual	75	73	61
with subj and prof level	70	68	59
<b>% with subject qual</b>	<b>93</b>	<b>94</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>86</b>	<b>87</b>	<b>88</b>
Teachers' average age (yrs)	42	43	44
<b>Female teachers</b>	50	49	42
with subject qual	45	45	38
with subj and prof level	42	42	37
<b>% with subject qual</b>	<b>90</b>	<b>92</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>84</b>	<b>86</b>	<b>88</b>
<b>Male teachers</b>	31	29	25
with subject qual	30	28	23
with subj and prof level	28	26	22
<b>% with subject qual</b>	<b>97</b>	<b>97</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>90</b>	<b>90</b>	<b>88</b>
<b>Eden &amp; Karoo teachers</b>	31	30	29
with subject qual	29	29	27
with subj and prof level	27	28	26
<b>% with subject qual</b>	<b>94</b>	<b>97</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>87</b>	<b>93</b>	<b>90</b>
<b>Metro East teachers</b>	50	48	38
with subject qual	46	44	34
with subj and prof level	43	40	33
<b>% with subject qual</b>	<b>92</b>	<b>92</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>86</b>	<b>83</b>	<b>87</b>
<b>Section 21 school teachers</b>	50	48	47
with subject qual	47	45	43
with subj and prof level	44	43	42
<b>% with subject qual</b>	<b>94</b>	<b>94</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>88</b>	<b>90</b>	<b>89</b>
<b>Non-Section 21 school teachers</b>	31	30	20
with subject qual	28	28	18
with subj and prof level	26	25	17
<b>% with subject qual</b>	<b>90</b>	<b>93</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>84</b>	<b>83</b>	<b>85</b>

**Table 6.30: FET subject counts and % profiles – Accounting (contd)**

GRADE	Accounting		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	37	31	25
with subject qual	35	29	22
with subj and prof level	32	25	20
<b>% with subject qual</b>	<b>95</b>	<b>94</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>86</b>	<b>81</b>	<b>80</b>
Teachers in schools <b>with fees</b>	44	47	42
with subject qual	40	44	39
with subj and prof level	38	43	39
<b>% with subject qual</b>	<b>91</b>	<b>94</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>86</b>	<b>91</b>	<b>93</b>
Teachers in <b>quintile 5</b> schools	36	39	34
with subject qual	32	36	31
with subj and prof level	30	35	31
<b>% with subject qual</b>	<b>89</b>	<b>92</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>83</b>	<b>90</b>	<b>91</b>
Teachers in <b>non-quintile 5</b> schools	45	39	33
with subject qual	43	37	30
with subj and prof level	40	33	28
<b>% with subject qual</b>	<b>96</b>	<b>95</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>89</b>	<b>85</b>	<b>85</b>

**Table 6.31: FET subject counts and % profiles – Agricultural Management, Sciences and Technology**

GRADE	Agricultural Management			Agricultural Sciences			Agricultural Technology		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Number of schools with Grade	2	3	4	6	6	9	1	1	2
Number of classes with teachers	5	8	9	11	8	12	2	2	3
with subject qual	1	3	3	11	7	11	0	0	0
with subj and prof level	1	3	3	6	6	8	0	0	0
Reported no. <b>learners</b> with teachers	137	271	334	434	304	269	80	84	108
with subject qual	23	78	96	434	244	236	0	0	0
with subj and prof level	23	78	96	225	207	173	0	0	0
Teachers' class size not reported	0	0	0	0	0	0	0	0	0
<b>Teachers</b>	4	6	7	7	6	10	2	2	3
with subject qual	1	3	3	7	5	9	0	0	0
with subj and prof level	1	3	3	4	4	7	0	0	0
<b>% with subject qual</b>	<b>25</b>	<b>50</b>	<b>43</b>	<b>100</b>	<b>83</b>	<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>25</b>	<b>50</b>	<b>43</b>	<b>57</b>	<b>67</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers' average age (yrs)	50	50	51	43	43	44	54	54	53
<b>Female teachers</b>	1	1	1	2	3	2	0	0	0
with subject qual	0	0	0	2	3	2	0	0	0
with subj and prof level	0	0	0	2	3	2	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Male teachers</b>	3	5	6	5	3	8	2	2	3
with subject qual	1	3	3	5	2	7	0	0	0
with subj and prof level	1	3	3	2	1	5	0	0	0
<b>% with subject qual</b>	<b>33</b>	<b>60</b>	<b>50</b>	<b>100</b>	<b>67</b>	<b>88</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>60</b>	<b>50</b>	<b>40</b>	<b>33</b>	<b>63</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Eden &amp; Karoo teachers</b>	3	4	4	3	3	4	2	2	2
with subject qual	1	3	3	3	3	4	0	0	0
with subj and prof level	1	3	3	2	3	4	0	0	0
<b>% with subject qual</b>	<b>33</b>	<b>75</b>	<b>75</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>75</b>	<b>75</b>	<b>67</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Metro East teachers</b>	1	2	3	4	3	6	0	0	1
with subject qual	0	0	0	4	2	5	0	0	0
with subj and prof level	0	0	0	2	1	3	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>67</b>	<b>83</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>33</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Section 21 school teachers</b>	3	4	4	3	3	4	2	2	2
with subject qual	1	3	3	3	3	4	0	0	0
with subj and prof level	1	3	3	2	3	4	0	0	0
<b>% with subject qual</b>	<b>33</b>	<b>75</b>	<b>75</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>75</b>	<b>75</b>	<b>67</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Non-Section 21 school teachers</b>	1	2	3	4	3	6	0	0	1
with subject qual	0	0	0	4	2	5	0	0	0
with subj and prof level	0	0	0	2	1	3	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>67</b>	<b>83</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>33</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.31: FET subject counts and % profiles – Agricultural Management, Sciences and Technology (contd)**

GRADE	Agricultural Management			Agricultural Sciences			Agricultural Technology		
	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	1	1	2	5	5	7	0	0	1
with subject qual	0	0	0	5	4	6	0	0	0
with subj and prof level	0	0	0	3	3	4	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>80</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>60</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in schools <b>with fees</b>	3	5	5	2	1	3	2	2	2
with subject qual	1	3	3	2	1	3	0	0	0
with subj and prof level	1	3	3	1	1	3	0	0	0
<b>% with subject qual</b>	<b>33</b>	<b>60</b>	<b>60</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>60</b>	<b>60</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>quintile 5</b> schools	3	5	5	2	1	3	2	2	2
with subject qual	1	3	3	2	1	3	0	0	0
with subj and prof level	1	3	3	1	1	3	0	0	0
<b>% with subject qual</b>	<b>33</b>	<b>60</b>	<b>60</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>60</b>	<b>60</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>non-quintile 5</b> schools	1	1	2	5	5	7	0	0	1
with subject qual	0	0	0	5	4	6	0	0	0
with subj and prof level	0	0	0	3	3	4	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>80</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>60</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.32: FET subject counts and % profiles – Business Studies**

	<b>Business Studies</b>		
<b>GRADE</b>	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	51	49	47
Number of classes with teachers	176	153	120
with subject qual	151	119	106
with subj and prof level	138	109	100
Reported no. <b>learners</b> with teachers	6709	5146	3363
with subject qual	5846	4076	2941
with subj and prof level	5307	3772	2770
Teachers' class size not reported	0	0	0
<b>Teachers</b>	89	79	69
with subject qual	76	67	60
with subj and prof level	68	61	56
<b>% with subject qual</b>	<b>85</b>	<b>85</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>77</b>	<b>81</b>
Teachers' average age (yrs)	41	41	40
<b>Female teachers</b>	53	34	35
with subject qual	47	30	32
with subj and prof level	42	25	29
<b>% with subject qual</b>	<b>89</b>	<b>88</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>79</b>	<b>74</b>	<b>83</b>
<b>Male teachers</b>	36	45	34
with subject qual	29	37	28
with subj and prof level	26	36	27
<b>% with subject qual</b>	<b>81</b>	<b>82</b>	<b>82</b>
<b>% with subj and prof level</b>	<b>72</b>	<b>80</b>	<b>79</b>
<b>Eden &amp; Karoo teachers</b>	38	33	27
with subject qual	29	25	19
with subj and prof level	25	21	17
<b>% with subject qual</b>	<b>76</b>	<b>76</b>	<b>70</b>
<b>% with subj and prof level</b>	<b>66</b>	<b>64</b>	<b>63</b>
<b>Metro East teachers</b>	51	46	42
with subject qual	47	42	41
with subj and prof level	43	40	39
<b>% with subject qual</b>	<b>92</b>	<b>91</b>	<b>98</b>
<b>% with subj and prof level</b>	<b>84</b>	<b>87</b>	<b>93</b>
<b>Section 21 school teachers</b>	57	54	45
with subject qual	46	45	36
with subj and prof level	41	41	34
<b>% with subject qual</b>	<b>81</b>	<b>83</b>	<b>80</b>
<b>% with subj and prof level</b>	<b>72</b>	<b>76</b>	<b>76</b>
<b>Non-Section 21 school teachers</b>	32	25	24
with subject qual	30	22	24
with subj and prof level	27	20	22
<b>% with subject qual</b>	<b>94</b>	<b>88</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>84</b>	<b>80</b>	<b>92</b>

**Table 6.32: FET subject counts and % profiles – Business Studies (contd)**

GRADE	Business Studies		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	41	29	26
with subject qual	35	24	23
with subj and prof level	31	20	20
<b>% with subject qual</b>	<b>85</b>	<b>83</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>69</b>	<b>77</b>
Teachers in schools <b>with fees</b>	48	50	43
with subject qual	41	43	37
with subj and prof level	37	41	36
<b>% with subject qual</b>	<b>85</b>	<b>86</b>	<b>86</b>
<b>% with subj and prof level</b>	<b>77</b>	<b>82</b>	<b>84</b>
Teachers in <b>quintile 5</b> schools	38	41	36
with subject qual	34	36	33
with subj and prof level	31	34	32
<b>% with subject qual</b>	<b>89</b>	<b>88</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>82</b>	<b>83</b>	<b>89</b>
Teachers in <b>non-quintile 5</b> schools	51	38	33
with subject qual	42	31	27
with subj and prof level	37	27	24
<b>% with subject qual</b>	<b>82</b>	<b>82</b>	<b>82</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>71</b>	<b>73</b>

**Table 6.33: FET subject counts and % profiles – Civil Technology**

GRADE	Civil Technology		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	15	16	17
Number of classes with teachers	23	21	20
with subject qual	7	6	8
with subj and prof level	3	3	3
Reported no. <b>learners</b> with teachers	542	462	313
with subject qual	131	130	124
with subj and prof level	52	39	34
Teachers' class size not reported	0	0	0
<b>Teachers</b>	17	18	18
with subject qual	5	6	7
with subj and prof level	3	3	3
<b>% with subject qual</b>	<b>29</b>	<b>33</b>	<b>39</b>
<b>% with subj and prof level</b>	<b>18</b>	<b>17</b>	<b>17</b>
Teachers' average age (yrs)	46	47	47
<b>Female teachers</b>	1	1	1
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Male teachers</b>	16	17	17
with subject qual	5	6	7
with subj and prof level	3	3	3
<b>% with subject qual</b>	<b>31</b>	<b>35</b>	<b>41</b>
<b>% with subj and prof level</b>	<b>19</b>	<b>18</b>	<b>18</b>
<b>Eden &amp; Karoo teachers</b>	11	12	13
with subject qual	3	3	4
with subj and prof level	2	2	2
<b>% with subject qual</b>	<b>27</b>	<b>25</b>	<b>31</b>
<b>% with subj and prof level</b>	<b>18</b>	<b>17</b>	<b>15</b>
<b>Metro East teachers</b>	6	6	5
with subject qual	2	3	3
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>33</b>	<b>50</b>	<b>60</b>
<b>% with subj and prof level</b>	<b>17</b>	<b>17</b>	<b>20</b>
<b>Section 21 school teachers</b>	14	14	14
with subject qual	3	3	4
with subj and prof level	2	2	2
<b>% with subject qual</b>	<b>21</b>	<b>21</b>	<b>29</b>
<b>% with subj and prof level</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Non-Section 21 school teachers</b>	3	4	4
with subject qual	2	3	3
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>67</b>	<b>75</b>	<b>75</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>25</b>	<b>25</b>

**Table 6.33: FET subject counts and % profiles – Civil Technology (contd)**

GRADE	Civil Technology		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	4	4	5
with subject qual	0	0	1
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>20</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in schools <b>with fees</b>	13	14	13
with subject qual	5	6	6
with subj and prof level	3	3	3
<b>% with subject qual</b>	<b>38</b>	<b>43</b>	<b>46</b>
<b>% with subj and prof level</b>	<b>23</b>	<b>21</b>	<b>23</b>
Teachers in <b>quintile 5</b> schools	10	10	9
with subject qual	4	5	5
with subj and prof level	3	3	3
<b>% with subject qual</b>	<b>40</b>	<b>50</b>	<b>56</b>
<b>% with subj and prof level</b>	<b>30</b>	<b>30</b>	<b>33</b>
Teachers in <b>non-quintile 5</b> schools	7	8	9
with subject qual	1	1	2
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>14</b>	<b>13</b>	<b>22</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.34: FET subject counts and % profiles – Computer Applications Technology**

<b>GRADE</b>	<b>Computer Applications Technology</b>		
	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	31	31	28
Number of classes with teachers	78	75	104
with subject qual	58	56	87
with subj and prof level	54	53	83
Reported no. <b>learners</b> with teachers	2018	1969	1563
with subject qual	1639	1438	1076
with subj and prof level	1533	1367	970
Teachers' class size not reported	1	0	2
<b>Teachers</b>	51	50	42
with subject qual	37	35	31
with subj and prof level	34	32	27
<b>% with subject qual</b>	<b>73</b>	<b>70</b>	<b>74</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>64</b>	<b>64</b>
Teachers' average age (yrs)	42	41	41
<b>Female teachers</b>	32	32	24
with subject qual	25	23	19
with subj and prof level	24	22	18
<b>% with subject qual</b>	<b>78</b>	<b>72</b>	<b>79</b>
<b>% with subj and prof level</b>	<b>75</b>	<b>69</b>	<b>75</b>
<b>Male teachers</b>	19	18	18
with subject qual	12	12	12
with subj and prof level	10	10	9
<b>% with subject qual</b>	<b>63</b>	<b>67</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>53</b>	<b>56</b>	<b>50</b>
<b>Eden &amp; Karoo teachers</b>	19	18	17
with subject qual	12	12	11
with subj and prof level	11	11	10
<b>% with subject qual</b>	<b>63</b>	<b>67</b>	<b>65</b>
<b>% with subj and prof level</b>	<b>58</b>	<b>61</b>	<b>59</b>
<b>Metro East teachers</b>	32	32	25
with subject qual	25	23	20
with subj and prof level	23	21	17
<b>% with subject qual</b>	<b>78</b>	<b>72</b>	<b>80</b>
<b>% with subj and prof level</b>	<b>72</b>	<b>66</b>	<b>68</b>
<b>Section 21 school teachers</b>	41	38	33
with subject qual	31	29	26
with subj and prof level	29	27	23
<b>% with subject qual</b>	<b>76</b>	<b>76</b>	<b>79</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>71</b>	<b>70</b>
<b>Non-Section 21 school teachers</b>	10	12	9
with subject qual	6	6	5
with subj and prof level	5	5	4
<b>% with subject qual</b>	<b>60</b>	<b>50</b>	<b>56</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>42</b>	<b>44</b>

**Table 6.34: FET subject counts and % profiles – Computer Applications Technology (contd)**

<b>GRADE</b>	<b>Computer Applications Technology</b>		
	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Teachers in <b>no-fee</b> schools	16	15	11
with subject qual	8	8	7
with subj and prof level	8	8	7
<b>% with subject qual</b>	<b>50</b>	<b>53</b>	<b>64</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>53</b>	<b>64</b>
Teachers in schools <b>with fees</b>	35	35	31
with subject qual	29	27	24
with subj and prof level	26	24	20
<b>% with subject qual</b>	<b>83</b>	<b>77</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>69</b>	<b>65</b>
Teachers in <b>quintile 5</b> schools	35	35	31
with subject qual	29	27	24
with subj and prof level	26	24	20
<b>% with subject qual</b>	<b>83</b>	<b>77</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>69</b>	<b>65</b>
Teachers in <b>non-quintile 5</b> schools	16	15	11
with subject qual	8	8	7
with subj and prof level	8	8	7
<b>% with subject qual</b>	<b>50</b>	<b>53</b>	<b>64</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>53</b>	<b>64</b>

**Table 6.35: FET subject counts and % profiles – Consumer Studies**

GRADE	Consumer Studies		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	39	41	37
Number of classes with teachers	82	112	93
with subject qual	75	104	92
with subj and prof level	58	88	78
Reported no. <b>learners</b> with teachers	2582	2165	1342
with subject qual	2389	1920	1314
with subj and prof level	1906	1486	1012
Teachers' class size not reported	0	1	1
<b>Teachers</b>	54	54	47
with subject qual	50	50	46
with subj and prof level	38	39	37
<b>% with subject qual</b>	<b>93</b>	<b>93</b>	<b>98</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>72</b>	<b>79</b>
Teachers' average age (yrs)	42	43	44
<b>Female teachers</b>	47	49	43
with subject qual	44	46	42
with subj and prof level	32	35	33
<b>% with subject qual</b>	<b>94</b>	<b>94</b>	<b>98</b>
<b>% with subj and prof level</b>	<b>68</b>	<b>71</b>	<b>77</b>
<b>Male teachers</b>	7	5	4
with subject qual	6	4	4
with subj and prof level	6	4	4
<b>% with subject qual</b>	<b>86</b>	<b>80</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>86</b>	<b>80</b>	<b>100</b>
<b>Eden &amp; Karoo teachers</b>	19	20	17
with subject qual	18	18	16
with subj and prof level	11	12	11
<b>% with subject qual</b>	<b>95</b>	<b>90</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>58</b>	<b>60</b>	<b>65</b>
<b>Metro East teachers</b>	35	34	30
with subject qual	32	32	30
with subj and prof level	27	27	26
<b>% with subject qual</b>	<b>91</b>	<b>94</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>77</b>	<b>79</b>	<b>87</b>
<b>Section 21 school teachers</b>	38	38	33
with subject qual	35	35	32
with subj and prof level	24	25	24
<b>% with subject qual</b>	<b>92</b>	<b>92</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>66</b>	<b>73</b>
<b>Non-Section 21 school teachers</b>	16	16	14
with subject qual	15	15	14
with subj and prof level	14	14	13
<b>% with subject qual</b>	<b>94</b>	<b>94</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>88</b>	<b>88</b>	<b>93</b>

**Table 6.35: FET subject counts and % profiles – Consumer Studies (contd)**

GRADE	Consumer Studies		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	14	15	13
with subject qual	14	13	12
with subj and prof level	13	13	11
<b>% with subject qual</b>	<b>100</b>	<b>87</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>93</b>	<b>87</b>	<b>85</b>
Teachers in schools <b>with fees</b>	40	39	34
with subject qual	36	37	34
with subj and prof level	25	26	26
<b>% with subject qual</b>	<b>90</b>	<b>95</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>67</b>	<b>76</b>
Teachers in <b>quintile 5</b> schools	31	31	27
with subject qual	27	29	27
with subj and prof level	20	22	22
<b>% with subject qual</b>	<b>87</b>	<b>94</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>65</b>	<b>71</b>	<b>81</b>
Teachers in <b>non-quintile 5</b> schools	23	23	20
with subject qual	23	21	19
with subj and prof level	18	17	15
<b>% with subject qual</b>	<b>100</b>	<b>91</b>	<b>95</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>74</b>	<b>75</b>

**Table 6.36: FET subject counts and % profiles – Dance Studies**

GRADE	Dance Studies		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	5	5	5
Number of classes with teachers	6	5	5
with subject qual	6	5	5
with subj and prof level	3	3	3
Reported no. <b>learners</b> with teachers	104	64	57
with subject qual	104	64	57
with subj and prof level	67	37	30
Teachers' class size not reported	0	0	0
<b>Teachers</b>	5	5	5
with subject qual	5	5	5
with subj and prof level	2	3	3
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>40</b>	<b>60</b>	<b>60</b>
Teachers' average age (yrs)	36	37	37
<b>Female teachers</b>	4	5	5
with subject qual	4	5	5
with subj and prof level	2	3	3
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>60</b>	<b>60</b>
<b>Male teachers</b>	1	0	0
with subject qual	1	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>100</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Eden &amp; Karoo teachers</b>	2	2	2
with subject qual	2	2	2
with subj and prof level	0	1	1
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>50</b>	<b>50</b>
<b>Metro East teachers</b>	3	3	3
with subject qual	3	3	3
with subj and prof level	2	2	2
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>67</b>	<b>67</b>
<b>Section 21 school teachers</b>	3	3	3
with subject qual	3	3	3
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>67</b>	<b>67</b>
<b>Non-Section 21 school teachers</b>	2	2	2
with subject qual	2	2	2
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>50</b>	<b>50</b>

**Table 6.36: FET subject counts and % profiles – Dance Studies (contd)**

GRADE	Dance Studies		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	2	2	2
with subject qual	2	2	2
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>50</b>	<b>50</b>
Teachers in schools <b>with fees</b>	3	3	3
with subject qual	3	3	3
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>67</b>	<b>67</b>
Teachers in <b>quintile 5</b> schools	3	3	3
with subject qual	3	3	3
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>67</b>	<b>67</b>
Teachers in <b>non-quintile 5</b> schools	2	2	2
with subject qual	2	2	2
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>50</b>	<b>50</b>

**Table 6.37: FET subject counts and % profiles – Design**

GRADE	Design		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	6	6	5
Number of classes with teachers	27	28	29
with subject qual	25	26	27
with subj and prof level	14	15	14
Reported no. <b>learners</b> with teachers	213	188	176
with subject qual	154	139	142
with subj and prof level	114	89	78
Teachers' class size not reported	0	0	0
<b>Teachers</b>	9	10	9
with subject qual	7	8	7
with subj and prof level	5	6	4
<b>% with subject qual</b>	<b>78</b>	<b>80</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>56</b>	<b>60</b>	<b>44</b>
Teachers' average age (yrs)	42	43	44
<b>Female teachers</b>	5	5	5
with subject qual	3	3	3
with subj and prof level	2	2	2
<b>% with subject qual</b>	<b>60</b>	<b>60</b>	<b>60</b>
<b>% with subj and prof level</b>	<b>40</b>	<b>40</b>	<b>40</b>
<b>Male teachers</b>	4	5	4
with subject qual	4	5	4
with subj and prof level	3	4	2
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>75</b>	<b>80</b>	<b>50</b>
<b>Eden &amp; Karoo teachers</b>	4	5	6
with subject qual	2	3	4
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>50</b>	<b>60</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>25</b>	<b>40</b>	<b>33</b>
<b>Metro East teachers</b>	5	5	3
with subject qual	5	5	3
with subj and prof level	4	4	2
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>80</b>	<b>67</b>
<b>Section 21 school teachers</b>	7	8	9
with subject qual	5	6	7
with subj and prof level	3	4	4
<b>% with subject qual</b>	<b>71</b>	<b>75</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>43</b>	<b>50</b>	<b>44</b>
<b>Non-Section 21 school teachers</b>	2	2	0
with subject qual	2	2	0
with subj and prof level	2	2	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>0</b>

**Table 6.37: FET subject counts and % profiles – Design (contd)**

GRADE	Design		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	2	2	2
with subject qual	2	2	2
with subj and prof level	1	1	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>50</b>	<b>0</b>
Teachers in schools <b>with fees</b>	7	8	7
with subject qual	5	6	5
with subj and prof level	4	5	4
<b>% with subject qual</b>	<b>71</b>	<b>75</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>57</b>	<b>63</b>	<b>57</b>
Teachers in <b>quintile 5</b> schools	7	8	7
with subject qual	5	6	5
with subj and prof level	4	5	4
<b>% with subject qual</b>	<b>71</b>	<b>75</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>57</b>	<b>63</b>	<b>57</b>
Teachers in <b>non-quintile 5</b> schools	2	2	2
with subject qual	2	2	2
with subj and prof level	1	1	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>50</b>	<b>0</b>

**Table 6.38: FET subject counts and % profiles – Dramatic Arts**

GRADE	Dramatic Arts		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	8	7	8
Number of classes with teachers	9	7	9
with subject qual	7	4	6
with subj and prof level	5	2	4
Reported no. <b>learners</b> with teachers	221	177	166
with subject qual	156	112	114
with subj and prof level	111	49	60
Teachers' class size not reported	0	0	0
<b>Teachers</b>	8	7	8
with subject qual	6	4	5
with subj and prof level	4	2	3
<b>% with subject qual</b>	<b>75</b>	<b>57</b>	<b>63</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>29</b>	<b>38</b>
Teachers' average age (yrs)	41	40	41
<b>Female teachers</b>	5	4	4
with subject qual	3	2	2
with subj and prof level	2	1	1
<b>% with subject qual</b>	<b>60</b>	<b>50</b>	<b>50</b>
<b>% with subj and prof level</b>	<b>40</b>	<b>25</b>	<b>25</b>
<b>Male teachers</b>	3	3	4
with subject qual	3	2	3
with subj and prof level	2	1	2
<b>% with subject qual</b>	<b>100</b>	<b>67</b>	<b>75</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>33</b>	<b>50</b>
<b>Eden &amp; Karoo teachers</b>	2	2	2
with subject qual	1	1	1
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>50</b>	<b>50</b>	<b>50</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Metro East teachers</b>	6	5	6
with subject qual	5	3	4
with subj and prof level	4	2	3
<b>% with subject qual</b>	<b>83</b>	<b>60</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>40</b>	<b>50</b>
<b>Section 21 school teachers</b>	6	4	5
with subject qual	4	2	3
with subj and prof level	2	0	1
<b>% with subject qual</b>	<b>67</b>	<b>50</b>	<b>60</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>0</b>	<b>20</b>
<b>Non-Section 21 school teachers</b>	2	3	3
with subject qual	2	2	2
with subj and prof level	2	2	2
<b>% with subject qual</b>	<b>100</b>	<b>67</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>67</b>	<b>67</b>

**Table 6.38: FET subject counts and % profiles – Dramatic Arts (contd)**

GRADE	Dramatic Arts		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	2	3	3
with subject qual	1	1	1
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>50</b>	<b>33</b>	<b>33</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>33</b>	<b>33</b>
Teachers in schools <b>with fees</b>	6	4	5
with subject qual	5	3	4
with subj and prof level	3	1	2
<b>% with subject qual</b>	<b>83</b>	<b>75</b>	<b>80</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>25</b>	<b>40</b>
Teachers in <b>quintile 5</b> schools	6	4	5
with subject qual	5	3	4
with subj and prof level	3	1	2
<b>% with subject qual</b>	<b>83</b>	<b>75</b>	<b>80</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>25</b>	<b>40</b>
Teachers in <b>non-quintile 5</b> schools	2	3	3
with subject qual	1	1	1
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>50</b>	<b>33</b>	<b>33</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>33</b>	<b>33</b>

**Table 6.39: FET subject counts and % profiles – Economics**

	<b>Economics</b>		
<b>GRADE</b>	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	38	42	36
Number of classes with teachers	111	104	71
with subject qual	101	99	69
with subj and prof level	92	87	57
Reported no. <b>learners</b> with teachers	4105	3495	1754
with subject qual	3772	3361	1720
with subj and prof level	3338	2866	1493
Teachers' class size not reported	0	0	1
<b>Teachers</b>	51	53	44
with subject qual	47	49	43
with subj and prof level	42	44	37
<b>% with subject qual</b>	<b>92</b>	<b>92</b>	<b>98</b>
<b>% with subj and prof level</b>	<b>82</b>	<b>83</b>	<b>84</b>
Teachers' average age (yrs)	40	41	42
<b>Female teachers</b>	23	25	21
with subject qual	21	24	21
with subj and prof level	18	22	17
<b>% with subject qual</b>	<b>91</b>	<b>96</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>88</b>	<b>81</b>
<b>Male teachers</b>	28	28	23
with subject qual	26	25	22
with subj and prof level	24	22	20
<b>% with subject qual</b>	<b>93</b>	<b>89</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>86</b>	<b>79</b>	<b>87</b>
<b>Eden &amp; Karoo teachers</b>	25	26	23
with subject qual	24	23	22
with subj and prof level	21	19	18
<b>% with subject qual</b>	<b>96</b>	<b>88</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>84</b>	<b>73</b>	<b>78</b>
<b>Metro East teachers</b>	26	27	21
with subject qual	23	26	21
with subj and prof level	21	25	19
<b>% with subject qual</b>	<b>88</b>	<b>96</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>81</b>	<b>93</b>	<b>90</b>
<b>Section 21 school teachers</b>	29	32	27
with subject qual	26	28	26
with subj and prof level	23	24	22
<b>% with subject qual</b>	<b>90</b>	<b>88</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>79</b>	<b>75</b>	<b>81</b>
<b>Non-Section 21 school teachers</b>	22	21	17
with subject qual	21	21	17
with subj and prof level	19	20	15
<b>% with subject qual</b>	<b>95</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>86</b>	<b>95</b>	<b>88</b>

**Table 6.39: FET subject counts and % profiles – Economics (contd)**

GRADE	Economics		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	29	30	24
with subject qual	27	29	23
with subj and prof level	24	25	20
<b>% with subject qual</b>	<b>93</b>	<b>97</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>83</b>	<b>83</b>	<b>83</b>
Teachers in schools <b>with fees</b>	22	23	20
with subject qual	20	20	20
with subj and prof level	18	19	17
<b>% with subject qual</b>	<b>91</b>	<b>87</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>82</b>	<b>83</b>	<b>85</b>
Teachers in <b>quintile 5</b> schools	15	16	13
with subject qual	13	14	13
with subj and prof level	12	14	11
<b>% with subject qual</b>	<b>87</b>	<b>88</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>88</b>	<b>85</b>
Teachers in <b>non-quintile 5</b> schools	36	37	31
with subject qual	34	35	30
with subj and prof level	30	30	26
<b>% with subject qual</b>	<b>94</b>	<b>95</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>83</b>	<b>81</b>	<b>84</b>

**Table 6.40: FET subject counts and % profiles – Electrical Technology**

<b>GRADE</b>	<b>Electrical Technology</b>		
	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	4	3	3
Number of classes with teachers	5	3	3
with subject qual	4	3	3
with subj and prof level	1	1	1
Reported no. <b>learners</b> with teachers	130	65	54
with subject qual	108	65	54
with subj and prof level	10	11	12
Teachers' class size not reported	0	0	0
<b>Teachers</b>	4	3	3
with subject qual	3	3	3
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>75</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>25</b>	<b>33</b>	<b>33</b>
Teachers' average age (yrs)	39	39	39
<b>Female teachers</b>	1	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Male teachers</b>	3	3	3
with subject qual	3	3	3
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>33</b>	<b>33</b>
<b>Eden &amp; Karoo teachers</b>	4	3	3
with subject qual	3	3	3
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>75</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>25</b>	<b>33</b>	<b>33</b>
<b>Metro East teachers</b>	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Section 21 school teachers</b>	4	3	3
with subject qual	3	3	3
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>75</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>25</b>	<b>33</b>	<b>33</b>
<b>Non-Section 21 school teachers</b>	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.40: FET subject counts and % profiles – Electrical Technology (contd)**

GRADE	Electrical Technology		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	3	2	2
with subject qual	2	2	2
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>67</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in schools <b>with fees</b>	1	1	1
with subject qual	1	1	1
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>100</b>
Teachers in <b>quintile 5</b> schools	1	1	1
with subject qual	1	1	1
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>100</b>
Teachers in <b>non-quintile 5</b> schools	3	2	2
with subject qual	2	2	2
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>67</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.41: FET subject counts and % profiles – Engineering Graphics and Design**

<b>GRADE</b>	<b>Engineering Graphics and Design</b>		
	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	11	11	10
Number of classes with teachers	21	18	15
with subject qual	18	13	11
with subj and prof level	8	9	9
Reported no. <b>learners</b> with teachers	681	477	350
with subject qual	585	375	264
with subj and prof level	253	237	207
Teachers' class size not reported	0	0	0
<b>Teachers</b>	15	15	12
with subject qual	13	11	8
with subj and prof level	8	8	6
<b>% with subject qual</b>	<b>87</b>	<b>73</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>53</b>	<b>53</b>	<b>50</b>
Teachers' average age (yrs)	41	43	44
<b>Female teachers</b>	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Male teachers</b>	15	15	12
with subject qual	13	11	8
with subj and prof level	8	8	6
<b>% with subject qual</b>	<b>87</b>	<b>73</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>53</b>	<b>53</b>	<b>50</b>
<b>Eden &amp; Karoo teachers</b>	10	11	9
with subject qual	8	7	5
with subj and prof level	4	4	3
<b>% with subject qual</b>	<b>80</b>	<b>64</b>	<b>56</b>
<b>% with subj and prof level</b>	<b>40</b>	<b>36</b>	<b>33</b>
<b>Metro East teachers</b>	5	4	3
with subject qual	5	4	3
with subj and prof level	4	4	3
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>100</b>	<b>100</b>
<b>Section 21 school teachers</b>	15	15	12
with subject qual	13	11	8
with subj and prof level	8	8	6
<b>% with subject qual</b>	<b>87</b>	<b>73</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>53</b>	<b>53</b>	<b>50</b>
<b>Non-Section 21 school teachers</b>	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.41: FET subject counts and % profiles – Engineering Graphics and Design (contd)**

<b>GRADE</b>	<b>Engineering Graphics and Design</b>		
	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Teachers in <b>no-fee</b> schools	2	2	1
with subject qual	2	2	1
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in schools with fees	13	13	11
with subject qual	11	9	7
with subj and prof level	8	8	6
<b>% with subject qual</b>	<b>85</b>	<b>69</b>	<b>64</b>
<b>% with subj and prof level</b>	<b>62</b>	<b>62</b>	<b>55</b>
Teachers in <b>quintile 5</b> schools	12	12	10
with subject qual	11	9	7
with subj and prof level	8	8	6
<b>% with subject qual</b>	<b>92</b>	<b>75</b>	<b>70</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>67</b>	<b>60</b>
Teachers in <b>non-quintile 5</b> schools	3	3	2
with subject qual	2	2	1
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>67</b>	<b>67</b>	<b>50</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.42: FET subject counts and % profiles – Geography**

	<b>Geography</b>		
<b>GRADE</b>	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	51	46	47
Number of classes with teachers	129	106	166
with subject qual	102	84	153
with subj and prof level	78	66	135
Reported no. <b>learners</b> with teachers	4879	3351	2476
with subject qual	3791	2778	2113
with subj and prof level	2997	2340	1738
Teachers' class size not reported	0	0	0
<b>Teachers</b>	73	62	61
with subject qual	61	52	53
with subj and prof level	46	42	43
<b>% with subject qual</b>	<b>84</b>	<b>84</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>68</b>	<b>70</b>
Teachers' average age (yrs)	41	44	44
<b>Female teachers</b>	32	24	23
with subject qual	28	20	21
with subj and prof level	25	18	19
<b>% with subject qual</b>	<b>88</b>	<b>83</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>75</b>	<b>83</b>
<b>Male teachers</b>	41	38	38
with subject qual	33	32	32
with subj and prof level	21	24	24
<b>% with subject qual</b>	<b>80</b>	<b>84</b>	<b>84</b>
<b>% with subj and prof level</b>	<b>51</b>	<b>63</b>	<b>63</b>
<b>Eden &amp; Karoo teachers</b>	26	23	22
with subject qual	21	17	17
with subj and prof level	14	11	10
<b>% with subject qual</b>	<b>81</b>	<b>74</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>54</b>	<b>48</b>	<b>45</b>
<b>Metro East teachers</b>	47	39	39
with subject qual	40	35	36
with subj and prof level	32	31	33
<b>% with subject qual</b>	<b>85</b>	<b>90</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>68</b>	<b>79</b>	<b>85</b>
<b>Section 21 school teachers</b>	41	35	36
with subject qual	34	27	29
with subj and prof level	25	20	22
<b>% with subject qual</b>	<b>83</b>	<b>77</b>	<b>81</b>
<b>% with subj and prof level</b>	<b>61</b>	<b>57</b>	<b>61</b>
<b>Non-Section 21 school teachers</b>	32	27	25
with subject qual	27	25	24
with subj and prof level	21	22	21
<b>% with subject qual</b>	<b>84</b>	<b>93</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>66</b>	<b>81</b>	<b>84</b>

**Table 6.42: FET subject counts and % profiles – Geography (contd)**

GRADE	Geography		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	34	32	27
with subject qual	29	27	25
with subj and prof level	24	22	21
<b>% with subject qual</b>	<b>85</b>	<b>84</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>69</b>	<b>78</b>
Teachers in schools <b>with fees</b>	39	30	34
with subject qual	32	25	28
with subj and prof level	22	20	22
<b>% with subject qual</b>	<b>82</b>	<b>83</b>	<b>82</b>
<b>% with subj and prof level</b>	<b>56</b>	<b>67</b>	<b>65</b>
Teachers in <b>quintile 5</b> schools	31	25	27
with subject qual	26	20	23
with subj and prof level	20	17	19
<b>% with subject qual</b>	<b>84</b>	<b>80</b>	<b>85</b>
<b>% with subj and prof level</b>	<b>65</b>	<b>68</b>	<b>70</b>
Teachers in <b>non-quintile 5</b> schools	42	37	34
with subject qual	35	32	30
with subj and prof level	26	25	24
<b>% with subject qual</b>	<b>83</b>	<b>86</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>62</b>	<b>68</b>	<b>71</b>

**Table 6.43: FET subject counts and % profiles – History**

GRADE	History		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	35	38	39
Number of classes with teachers	70	233	172
with subject qual	63	184	158
with subj and prof level	54	172	145
Reported no. <b>learners</b> with teachers	2645	2066	1338
with subject qual	2104	1992	1282
with subj and prof level	1746	1515	963
Teachers' class size not reported	0	0	2
<b>Teachers</b>	45	43	47
with subject qual	40	40	44
with subj and prof level	33	32	34
<b>% with subject qual</b>	<b>89</b>	<b>93</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>74</b>	<b>72</b>
Teachers' average age (yrs)	44	43	44
<b>Female teachers</b>	18	16	15
with subject qual	16	14	13
with subj and prof level	15	12	9
<b>% with subject qual</b>	<b>89</b>	<b>88</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>83</b>	<b>75</b>	<b>60</b>
<b>Male teachers</b>	27	27	32
with subject qual	24	26	31
with subj and prof level	18	20	25
<b>% with subject qual</b>	<b>89</b>	<b>96</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>74</b>	<b>78</b>
<b>Eden &amp; Karoo teachers</b>	21	17	18
with subject qual	18	15	16
with subj and prof level	16	13	14
<b>% with subject qual</b>	<b>86</b>	<b>88</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>76</b>	<b>78</b>
<b>Metro East teachers</b>	24	26	29
with subject qual	22	25	28
with subj and prof level	17	19	20
<b>% with subject qual</b>	<b>92</b>	<b>96</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>73</b>	<b>69</b>
<b>Section 21 school teachers</b>	27	25	24
with subject qual	24	23	22
with subj and prof level	21	19	18
<b>% with subject qual</b>	<b>89</b>	<b>92</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>76</b>	<b>75</b>
<b>Non-Section 21 school teachers</b>	18	18	23
with subject qual	16	17	22
with subj and prof level	12	13	16
<b>% with subject qual</b>	<b>89</b>	<b>94</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>72</b>	<b>70</b>

**Table 6.43: FET subject counts and % profiles – History (contd)**

GRADE	History		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	23	22	26
with subject qual	21	20	24
with subj and prof level	18	17	18
<b>% with subject qual</b>	<b>91</b>	<b>91</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>77</b>	<b>69</b>
Teachers in schools <b>with fees</b>	22	21	21
with subject qual	19	20	20
with subj and prof level	15	15	16
<b>% with subject qual</b>	<b>86</b>	<b>95</b>	<b>95</b>
<b>% with subj and prof level</b>	<b>68</b>	<b>71</b>	<b>76</b>
Teachers in <b>quintile 5</b> schools	14	15	15
with subject qual	13	15	15
with subj and prof level	10	11	12
<b>% with subject qual</b>	<b>93</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>73</b>	<b>80</b>
Teachers in <b>non-quintile 5</b> schools	31	28	32
with subject qual	27	25	29
with subj and prof level	23	21	22
<b>% with subject qual</b>	<b>87</b>	<b>89</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>75</b>	<b>69</b>

**Table 6.44: FET subject counts and % profiles – Hospitality Studies**

GRADE	Hospitality Studies		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	6	5	3
Number of classes with teachers	7	12	4
with subject qual	3	3	0
with subj and prof level	1	0	0
Reported no. <b>learners</b> with teachers	177	242	74
with subject qual	70	68	0
with subj and prof level	20	0	0
Teachers' class size not reported	0	0	0
<b>Teachers</b>	7	6	3
with subject qual	3	2	0
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>43</b>	<b>33</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>14</b>	<b>0</b>	<b>0</b>
Teachers' average age (yrs)	40	41	49
<b>Female teachers</b>	3	3	1
with subject qual	2	1	0
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>67</b>	<b>33</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>0</b>	<b>0</b>
<b>Male teachers</b>	4	3	2
with subject qual	1	1	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>25</b>	<b>33</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Eden &amp; Karoo teachers</b>	4	2	0
with subject qual	2	2	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Metro East teachers</b>	3	4	3
with subject qual	1	0	0
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>33</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>0</b>	<b>0</b>
<b>Section 21 school teachers</b>	6	4	2
with subject qual	2	2	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>33</b>	<b>50</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Non-Section 21 school teachers</b>	1	2	1
with subject qual	1	0	0
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>100</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>0</b>	<b>0</b>

**Table 6.44: FET subject counts and % profiles – Hospitality Studies (contd)**

GRADE	Hospitality Studies		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	2	0	0
with subject qual	1	0	0
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>50</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>0</b>	<b>0</b>
Teachers in schools <b>with fees</b>	5	6	3
with subject qual	2	2	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>40</b>	<b>33</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>quintile 5</b> schools	4	6	3
with subject qual	2	2	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>50</b>	<b>33</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>non-quintile 5</b> schools	3	0	0
with subject qual	1	0	0
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>33</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>0</b>	<b>0</b>

**Table 6.45: FET subject counts and % profiles – Information Technology**

<b>GRADE</b>	<b>Information Technology</b>		
	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	10	10	8
Number of classes with teachers	12	16	10
with subject qual	9	9	8
with subj and prof level	5	5	4
Reported no. <b>learners</b> with teachers	187	320	138
with subject qual	134	104	111
with subj and prof level	70	40	44
Teachers' class size not reported	0	0	0
<b>Teachers</b>	11	12	9
with subject qual	8	8	7
with subj and prof level	5	5	4
<b>% with subject qual</b>	<b>73</b>	<b>67</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>42</b>	<b>44</b>
Teachers' average age (yrs)	43	41	42
<b>Female teachers</b>	4	4	2
with subject qual	3	3	2
with subj and prof level	2	2	1
<b>% with subject qual</b>	<b>75</b>	<b>75</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>50</b>	<b>50</b>
<b>Male teachers</b>	7	8	7
with subject qual	5	5	5
with subj and prof level	3	3	3
<b>% with subject qual</b>	<b>71</b>	<b>63</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>43</b>	<b>38</b>	<b>43</b>
<b>Eden &amp; Karoo teachers</b>	4	5	3
with subject qual	4	4	3
with subj and prof level	3	3	2
<b>% with subject qual</b>	<b>100</b>	<b>80</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>75</b>	<b>60</b>	<b>67</b>
<b>Metro East teachers</b>	7	7	6
with subject qual	4	4	4
with subj and prof level	2	2	2
<b>% with subject qual</b>	<b>57</b>	<b>57</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>29</b>	<b>29</b>	<b>33</b>
<b>Section 21 school teachers</b>	11	11	9
with subject qual	8	8	7
with subj and prof level	5	5	4
<b>% with subject qual</b>	<b>73</b>	<b>73</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>45</b>	<b>44</b>
<b>Non-Section 21 school teachers</b>	0	1	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.45: FET subject counts and % profiles – Information Technology (contd)**

GRADE	Information Technology		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	0	1	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in schools <b>with fees</b>	11	11	9
with subject qual	8	8	7
with subj and prof level	5	5	4
<b>% with subject qual</b>	<b>73</b>	<b>73</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>45</b>	<b>44</b>
Teachers in <b>quintile 5</b> schools	11	11	9
with subject qual	8	8	7
with subj and prof level	5	5	4
<b>% with subject qual</b>	<b>73</b>	<b>73</b>	<b>78</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>45</b>	<b>44</b>
Teachers in <b>non-quintile 5</b> schools	0	1	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.46: FET subject counts and % profiles – Life Orientation**

GRADE	Life Orientation		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	57	53	55
Number of classes with teachers	347	568	1031
with subject qual	204	461	947
with subj and prof level	149	413	623
Reported no. <b>learners</b> with teachers	13993	11469	7808
with subject qual	7917	7672	5936
with subj and prof level	5881	5851	4925
Teachers' class size not reported	4	3	9
<b>Teachers</b>	138	113	97
with subject qual	80	76	72
with subj and prof level	57	54	54
<b>% with subject qual</b>	<b>58</b>	<b>67</b>	<b>74</b>
<b>% with subj and prof level</b>	<b>41</b>	<b>48</b>	<b>56</b>
Teachers' average age (yrs)	42	42	42
<b>Female teachers</b>	83	77	68
with subject qual	48	49	48
with subj and prof level	34	33	35
<b>% with subject qual</b>	<b>58</b>	<b>64</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>41</b>	<b>43</b>	<b>51</b>
<b>Male teachers</b>	55	36	29
with subject qual	32	27	24
with subj and prof level	23	21	19
<b>% with subject qual</b>	<b>58</b>	<b>75</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>42</b>	<b>58</b>	<b>66</b>
<b>Eden &amp; Karoo teachers</b>	59	46	42
with subject qual	35	30	33
with subj and prof level	21	16	23
<b>% with subject qual</b>	<b>59</b>	<b>65</b>	<b>79</b>
<b>% with subj and prof level</b>	<b>36</b>	<b>35</b>	<b>55</b>
<b>Metro East teachers</b>	79	67	55
with subject qual	45	46	39
with subj and prof level	36	38	31
<b>% with subject qual</b>	<b>57</b>	<b>69</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>46</b>	<b>57</b>	<b>56</b>
<b>Section 21 school teachers</b>	88	74	65
with subject qual	54	49	50
with subj and prof level	36	31	36
<b>% with subject qual</b>	<b>61</b>	<b>66</b>	<b>77</b>
<b>% with subj and prof level</b>	<b>41</b>	<b>42</b>	<b>55</b>
<b>Non-Section 21 school teachers</b>	50	39	32
with subject qual	26	27	22
with subj and prof level	21	23	18
<b>% with subject qual</b>	<b>52</b>	<b>69</b>	<b>69</b>
<b>% with subj and prof level</b>	<b>42</b>	<b>59</b>	<b>56</b>

**Table 6.46: FET subject counts and % profiles – Life Orientation (contd)**

GRADE	Life Orientation		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	59	44	38
with subject qual	29	33	30
with subj and prof level	21	27	26
<b>% with subject qual</b>	<b>49</b>	<b>75</b>	<b>79</b>
<b>% with subj and prof level</b>	<b>36</b>	<b>61</b>	<b>68</b>
Teachers in schools <b>with fees</b>	79	69	59
with subject qual	51	43	42
with subj and prof level	36	27	28
<b>% with subject qual</b>	<b>65</b>	<b>62</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>46</b>	<b>39</b>	<b>47</b>
Teachers in <b>quintile 5</b> schools	67	58	49
with subject qual	44	36	36
with subj and prof level	31	23	25
<b>% with subject qual</b>	<b>66</b>	<b>62</b>	<b>73</b>
<b>% with subj and prof level</b>	<b>46</b>	<b>40</b>	<b>51</b>
Teachers in <b>non-quintile 5</b> schools	71	55	48
with subject qual	36	40	36
with subj and prof level	26	31	29
<b>% with subject qual</b>	<b>51</b>	<b>73</b>	<b>75</b>
<b>% with subj and prof level</b>	<b>37</b>	<b>56</b>	<b>60</b>

**Table 6.47: FET subject counts and % profiles – Life Sciences**

	Life Sciences		
GRADE	Gr 10	Gr 11	Gr 12
Number of schools with Grade	51	54	51
Number of classes with teachers	171	167	245
with subject qual	137	130	235
with subj and prof level	118	109	221
Reported no. <b>learners</b> with teachers	6383	5092	3556
with subject qual	5063	4077	3239
with subj and prof level	4323	3408	2779
Teachers' class size not reported	0	1	1
<b>Teachers</b>	89	86	78
with subject qual	75	74	73
with subj and prof level	64	64	64
<b>% with subject qual</b>	<b>84</b>	<b>86</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>72</b>	<b>74</b>	<b>82</b>
Teachers' average age (yrs)	44	44	44
<b>Female teachers</b>	56	51	45
with subject qual	46	43	41
with subj and prof level	39	38	36
<b>% with subject qual</b>	<b>82</b>	<b>84</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>75</b>	<b>80</b>
<b>Male teachers</b>	33	35	33
with subject qual	29	31	32
with subj and prof level	25	26	28
<b>% with subject qual</b>	<b>88</b>	<b>89</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>74</b>	<b>85</b>
<b>Eden &amp; Karoo teachers</b>	31	35	28
with subject qual	26	29	26
with subj and prof level	20	23	22
<b>% with subject qual</b>	<b>84</b>	<b>83</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>65</b>	<b>66</b>	<b>79</b>
<b>Metro East teachers</b>	58	51	50
with subject qual	49	45	47
with subj and prof level	44	41	42
<b>% with subject qual</b>	<b>84</b>	<b>88</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>80</b>	<b>84</b>
<b>Section 21 school teachers</b>	54	59	51
with subject qual	45	51	47
with subj and prof level	37	43	42
<b>% with subject qual</b>	<b>83</b>	<b>86</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>69</b>	<b>73</b>	<b>82</b>
<b>Non-Section 21 school teachers</b>	35	27	27
with subject qual	30	23	26
with subj and prof level	27	21	22
<b>% with subject qual</b>	<b>86</b>	<b>85</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>77</b>	<b>78</b>	<b>81</b>

**Table 6.47: FET subject counts and % profiles – Life Sciences (contd)**

GRADE	Life Sciences		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	33	29	29
with subject qual	29	26	28
with subj and prof level	24	22	23
<b>% with subject qual</b>	<b>88</b>	<b>90</b>	<b>97</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>76</b>	<b>79</b>
Teachers in schools <b>with fees</b>	56	57	49
with subject qual	46	48	45
with subj and prof level	40	42	41
<b>% with subject qual</b>	<b>82</b>	<b>84</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>74</b>	<b>84</b>
Teachers in <b>quintile 5</b> schools	45	48	41
with subject qual	38	41	38
with subj and prof level	35	37	34
<b>% with subject qual</b>	<b>84</b>	<b>85</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>77</b>	<b>83</b>
Teachers in <b>non-quintile 5</b> schools	44	38	37
with subject qual	37	33	35
with subj and prof level	29	27	30
<b>% with subject qual</b>	<b>84</b>	<b>87</b>	<b>95</b>
<b>% with subj and prof level</b>	<b>66</b>	<b>71</b>	<b>81</b>

**Table 6.48: FET subject counts and % profiles – Mathematical Literacy**

GRADE	Mathematical Literacy		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	47	53	54
Number of classes with teachers	361	237	256
with subject qual	136	160	192
with subj and prof level	88	115	166
Reported no. <b>learners</b> with teachers	6263	7194	4469
with subject qual	5140	5739	3959
with subj and prof level	3328	3993	3092
Teachers' class size not reported	1	0	2
<b>Teachers</b>	106	107	91
with subject qual	80	81	77
with subj and prof level	53	59	61
<b>% with subject qual</b>	<b>75</b>	<b>76</b>	<b>85</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>55</b>	<b>67</b>
Teachers' average age (yrs)	40	39	40
<b>Female teachers</b>	55	55	54
with subject qual	43	42	47
with subj and prof level	32	31	37
<b>% with subject qual</b>	<b>78</b>	<b>76</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>58</b>	<b>56</b>	<b>69</b>
<b>Male teachers</b>	51	52	37
with subject qual	37	39	30
with subj and prof level	21	28	24
<b>% with subject qual</b>	<b>73</b>	<b>75</b>	<b>81</b>
<b>% with subj and prof level</b>	<b>41</b>	<b>54</b>	<b>65</b>
<b>Eden &amp; Karoo teachers</b>	44	45	33
with subject qual	31	28	25
with subj and prof level	16	16	17
<b>% with subject qual</b>	<b>70</b>	<b>62</b>	<b>76</b>
<b>% with subj and prof level</b>	<b>36</b>	<b>36</b>	<b>52</b>
<b>Metro East teachers</b>	62	62	58
with subject qual	49	53	52
with subj and prof level	37	43	44
<b>% with subject qual</b>	<b>79</b>	<b>85</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>60</b>	<b>69</b>	<b>76</b>
<b>Section 21 school teachers</b>	74	75	63
with subject qual	52	53	50
with subj and prof level	33	36	40
<b>% with subject qual</b>	<b>70</b>	<b>71</b>	<b>79</b>
<b>% with subj and prof level</b>	<b>45</b>	<b>48</b>	<b>63</b>
<b>Non-Section 21 school teachers</b>	32	32	28
with subject qual	28	28	27
with subj and prof level	20	23	21
<b>% with subject qual</b>	<b>88</b>	<b>88</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>72</b>	<b>75</b>

**Table 6.48: FET subject counts and % profiles – Mathematical Literacy (contd)**

GRADE	Mathematical Literacy		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	36	38	31
with subject qual	27	32	29
with subj and prof level	19	25	23
<b>% with subject qual</b>	<b>75</b>	<b>84</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>53</b>	<b>66</b>	<b>74</b>
Teachers in schools <b>with fees</b>	70	69	60
with subject qual	53	49	48
with subj and prof level	34	34	38
<b>% with subject qual</b>	<b>76</b>	<b>71</b>	<b>80</b>
<b>% with subj and prof level</b>	<b>49</b>	<b>49</b>	<b>63</b>
Teachers in <b>quintile 5</b> schools	54	57	52
with subject qual	41	44	43
with subj and prof level	29	32	35
<b>% with subject qual</b>	<b>76</b>	<b>77</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>54</b>	<b>56</b>	<b>67</b>
Teachers in <b>non-quintile 5</b> schools	52	50	39
with subject qual	39	37	34
with subj and prof level	24	27	26
<b>% with subject qual</b>	<b>75</b>	<b>74</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>46</b>	<b>54</b>	<b>67</b>

**Table 6.49: FET subject counts and % profiles – Mathematics**

	<b>Mathematics</b>		
<b>GRADE</b>	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	53	53	53
Number of classes with teachers	183	173	130
with subject qual	178	162	121
with subj and prof level	122	135	93
Reported no. <b>learners</b> with teachers	6697	5397	3390
with subject qual	6485	5116	3150
with subj and prof level	4345	4270	2274
Teachers' class size not reported	0	0	0
<b>Teachers</b>	110	105	88
with subject qual	106	100	82
with subj and prof level	77	82	63
<b>% with subject qual</b>	<b>96</b>	<b>95</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>78</b>	<b>72</b>
Teachers' average age (yrs)	41	42	43
<b>Female teachers</b>	63	61	49
with subject qual	60	59	46
with subj and prof level	47	49	37
<b>% with subject qual</b>	<b>95</b>	<b>97</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>75</b>	<b>80</b>	<b>76</b>
<b>Male teachers</b>	47	44	39
with subject qual	46	41	36
with subj and prof level	30	33	26
<b>% with subject qual</b>	<b>98</b>	<b>93</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>64</b>	<b>75</b>	<b>67</b>
<b>Eden &amp; Karoo teachers</b>	40	37	35
with subject qual	39	33	31
with subj and prof level	25	27	25
<b>% with subject qual</b>	<b>98</b>	<b>89</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>73</b>	<b>71</b>
<b>Metro East teachers</b>	70	68	53
with subject qual	67	67	51
with subj and prof level	52	55	38
<b>% with subject qual</b>	<b>96</b>	<b>99</b>	<b>96</b>
<b>% with subj and prof level</b>	<b>74</b>	<b>81</b>	<b>72</b>
<b>Section 21 school teachers</b>	72	68	58
with subject qual	71	64	54
with subj and prof level	51	53	44
<b>% with subject qual</b>	<b>99</b>	<b>94</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>78</b>	<b>76</b>
<b>Non-Section 21 school teachers</b>	38	37	30
with subject qual	35	36	28
with subj and prof level	26	29	19
<b>% with subject qual</b>	<b>92</b>	<b>97</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>68</b>	<b>78</b>	<b>63</b>

**Table 6.49: FET subject counts and % profiles – Mathematics (contd)**

GRADE	Mathematics		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	44	39	36
with subject qual	41	37	33
with subj and prof level	30	31	25
<b>% with subject qual</b>	<b>93</b>	<b>95</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>68</b>	<b>79</b>	<b>69</b>
Teachers in schools <b>with fees</b>	66	66	52
with subject qual	65	63	49
with subj and prof level	47	51	38
<b>% with subject qual</b>	<b>98</b>	<b>95</b>	<b>94</b>
<b>% with subj and prof level</b>	<b>71</b>	<b>77</b>	<b>73</b>
Teachers in <b>quintile 5</b> schools	58	57	44
with subject qual	57	55	42
with subj and prof level	44	45	33
<b>% with subject qual</b>	<b>98</b>	<b>96</b>	<b>95</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>79</b>	<b>75</b>
Teachers in <b>non-quintile 5</b> schools	52	48	44
with subject qual	49	45	40
with subj and prof level	33	37	30
<b>% with subject qual</b>	<b>94</b>	<b>94</b>	<b>91</b>
<b>% with subj and prof level</b>	<b>63</b>	<b>77</b>	<b>68</b>

**Table 6.50: FET subject counts and % profiles – Mechanical Technology**

GRADE	Mechanical Technology		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	4	3	4
Number of classes with teachers	6	4	4
with subject qual	0	0	0
with subj and prof level	0	0	0
Reported no. <b>learners</b> with teachers	171	90	90
with subject qual	0	0	0
with subj and prof level	0	0	0
Teachers' class size not reported	1	0	0
<b>Teachers</b>	4	3	4
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers' average age (yrs)	51	44	47
<b>Female teachers</b>	2	1	2
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Male teachers</b>	2	2	2
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Eden &amp; Karoo teachers</b>	3	2	3
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Metro East teachers</b>	1	1	1
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Section 21 school teachers</b>	3	3	4
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Non-Section 21 school teachers</b>	1	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.50: FET subject counts and % profiles – Mechanical Technology (contd)**

<b>GRADE</b>	<b>Mechanical Technology</b>		
	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Teachers in <b>no-fee</b> schools	2	1	1
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in schools <b>with fees</b>	2	2	3
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>quintile 5</b> schools	1	2	3
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>non-quintile 5</b> schools	3	1	1
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.51: FET subject counts and % profiles – Music**

GRADE	Music		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	10	9	8
Number of classes with teachers	22	19	16
with subject qual	22	19	16
with subj and prof level	10	8	9
Reported no. <b>learners</b> with teachers	137	72	60
with subject qual	137	72	60
with subj and prof level	69	23	30
Teachers' class size not reported	1	2	1
<b>Teachers</b>	18	17	14
with subject qual	18	17	14
with subj and prof level	8	8	7
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>44</b>	<b>47</b>	<b>50</b>
Teachers' average age (yrs)	39	40	42
<b>Female teachers</b>	14	14	13
with subject qual	14	14	13
with subj and prof level	7	8	7
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>57</b>	<b>54</b>
<b>Male teachers</b>	4	3	1
with subject qual	4	3	1
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>25</b>	<b>0</b>	<b>0</b>
<b>Eden &amp; Karoo teachers</b>	3	2	2
with subject qual	3	2	2
with subj and prof level	1	1	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>50</b>	<b>0</b>
<b>Metro East teachers</b>	15	15	12
with subject qual	15	15	12
with subj and prof level	7	7	7
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>47</b>	<b>47</b>	<b>58</b>
<b>Section 21 school teachers</b>	16	16	14
with subject qual	16	16	14
with subj and prof level	7	8	7
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>44</b>	<b>50</b>	<b>50</b>
<b>Non-Section 21 school teachers</b>	2	1	0
with subject qual	2	1	0
with subj and prof level	1	0	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>0</b>	<b>0</b>

**Table 6.51: FET subject counts and % profiles – Music (contd)**

GRADE	Music		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	2	1	0
with subject qual	2	1	0
with subj and prof level	2	1	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>0</b>
Teachers in schools <b>with fees</b>	16	16	14
with subject qual	16	16	14
with subj and prof level	6	7	7
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>38</b>	<b>44</b>	<b>50</b>
Teachers in <b>quintile 5</b> schools	16	16	14
with subject qual	16	16	14
with subj and prof level	6	7	7
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>38</b>	<b>44</b>	<b>50</b>
Teachers in <b>non-quintile 5</b> schools	2	1	0
with subject qual	2	1	0
with subj and prof level	2	1	0
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>0</b>

**Table 6.52: FET subject counts and % profiles – Physical Sciences**

GRADE	Physical Sciences		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	51	48	49
Number of classes with teachers	121	104	97
with subject qual	97	85	80
with subj and prof level	90	76	72
Reported no. <b>learners</b> with teachers	4468	3405	2504
with subject qual	3563	2810	2089
with subj and prof level	3277	2512	1865
Teachers' class size not reported	0	0	0
<b>Teachers</b>	78	60	61
with subject qual	64	52	52
with subj and prof level	60	48	47
<b>% with subject qual</b>	<b>82</b>	<b>87</b>	<b>85</b>
<b>% with subj and prof level</b>	<b>77</b>	<b>80</b>	<b>77</b>
Teachers' average age (yrs)	37	41	41
<b>Female teachers</b>	44	30	30
with subject qual	34	25	25
with subj and prof level	31	22	21
<b>% with subject qual</b>	<b>77</b>	<b>83</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>73</b>	<b>70</b>
<b>Male teachers</b>	34	30	31
with subject qual	30	27	27
with subj and prof level	29	26	26
<b>% with subject qual</b>	<b>88</b>	<b>90</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>85</b>	<b>87</b>	<b>84</b>
<b>Eden &amp; Karoo teachers</b>	27	27	26
with subject qual	21	24	23
with subj and prof level	21	23	22
<b>% with subject qual</b>	<b>78</b>	<b>89</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>85</b>	<b>85</b>
<b>Metro East teachers</b>	51	33	35
with subject qual	43	28	29
with subj and prof level	39	25	25
<b>% with subject qual</b>	<b>84</b>	<b>85</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>76</b>	<b>71</b>
<b>Section 21 school teachers</b>	45	42	41
with subject qual	35	36	34
with subj and prof level	35	33	31
<b>% with subject qual</b>	<b>78</b>	<b>86</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>78</b>	<b>79</b>	<b>76</b>
<b>Non-Section 21 school teachers</b>	33	18	20
with subject qual	29	16	18
with subj and prof level	25	15	16
<b>% with subject qual</b>	<b>88</b>	<b>89</b>	<b>90</b>
<b>% with subj and prof level</b>	<b>76</b>	<b>83</b>	<b>80</b>

**Table 6.52: FET subject counts and % profiles – Physical Sciences (contd)**

GRADE	Physical Sciences		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	37	23	24
with subject qual	31	20	21
with subj and prof level	27	18	18
<b>% with subject qual</b>	<b>84</b>	<b>87</b>	<b>88</b>
<b>% with subj and prof level</b>	<b>73</b>	<b>78</b>	<b>75</b>
Teachers in schools <b>with fees</b>	41	37	37
with subject qual	33	32	31
with subj and prof level	33	30	29
<b>% with subject qual</b>	<b>80</b>	<b>86</b>	<b>84</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>81</b>	<b>78</b>
Teachers in <b>quintile 5</b> schools	34	30	30
with subject qual	29	26	25
with subj and prof level	29	25	24
<b>% with subject qual</b>	<b>85</b>	<b>87</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>85</b>	<b>83</b>	<b>80</b>
Teachers in <b>non-quintile 5</b> schools	44	30	31
with subject qual	35	26	27
with subj and prof level	31	23	23
<b>% with subject qual</b>	<b>80</b>	<b>87</b>	<b>87</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>77</b>	<b>74</b>

**Table 6.53: FET subject counts and % profiles – Religion Studies**

GRADE	Religion Studies		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	1	3	2
Number of classes with teachers	5	6	4
with subject qual	1	6	4
with subj and prof level	1	5	4
Reported no. <b>learners</b> with teachers	42	232	96
with subject qual	42	232	96
with subj and prof level	42	192	96
Teachers' class size not reported	1	0	0
<b>Teachers</b>	2	3	2
with subject qual	1	3	2
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>67</b>	<b>100</b>
Teachers' average age (yrs)	46	47	47
<b>Female teachers</b>	0	1	1
with subject qual	0	1	1
with subj and prof level	0	1	1
<b>% with subject qual</b>	<b>0</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>100</b>	<b>100</b>
<b>Male teachers</b>	2	2	1
with subject qual	1	2	1
with subj and prof level	1	1	1
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>50</b>	<b>100</b>
<b>Eden &amp; Karoo teachers</b>	2	3	2
with subject qual	1	3	2
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>67</b>	<b>100</b>
<b>Metro East teachers</b>	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Section 21 school teachers</b>	2	3	2
with subject qual	1	3	2
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>67</b>	<b>100</b>
<b>Non-Section 21 school teachers</b>	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6.53: FET subject counts and % profiles – Religion Studies (contd)**

GRADE	Religion Studies		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	2	3	2
with subject qual	1	3	2
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>67</b>	<b>100</b>
Teachers in schools <b>with fees</b>	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>quintile 5</b> schools	0	0	0
with subject qual	0	0	0
with subj and prof level	0	0	0
<b>% with subject qual</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>0</b>	<b>0</b>	<b>0</b>
Teachers in <b>non-quintile 5</b> schools	2	3	2
with subject qual	1	3	2
with subj and prof level	1	2	2
<b>% with subject qual</b>	<b>50</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>67</b>	<b>100</b>

**Table 6.54: FET subject counts and % profiles – Tourism**

GRADE	Tourism		
	Gr 10	Gr 11	Gr 12
Number of schools with Grade	19	18	17
Number of classes with teachers	36	76	117
with subject qual	27	68	108
with subj and prof level	20	10	7
Reported no. <b>learners</b> with teachers	1356	922	658
with subject qual	1061	678	416
with subj and prof level	795	304	208
Teachers' class size not reported	0	0	1
<b>Teachers</b>	26	21	21
with subject qual	19	15	13
with subj and prof level	13	7	6
<b>% with subject qual</b>	<b>73</b>	<b>71</b>	<b>62</b>
<b>% with subj and prof level</b>	<b>50</b>	<b>33</b>	<b>29</b>
Teachers' average age (yrs)	43	42	41
<b>Female teachers</b>	15	9	12
with subject qual	10	6	7
with subj and prof level	7	3	3
<b>% with subject qual</b>	<b>67</b>	<b>67</b>	<b>58</b>
<b>% with subj and prof level</b>	<b>47</b>	<b>33</b>	<b>25</b>
<b>Male teachers</b>	11	12	9
with subject qual	9	9	6
with subj and prof level	6	4	3
<b>% with subject qual</b>	<b>82</b>	<b>75</b>	<b>67</b>
<b>% with subj and prof level</b>	<b>55</b>	<b>33</b>	<b>33</b>
<b>Eden &amp; Karoo teachers</b>	10	10	10
with subject qual	6	7	6
with subj and prof level	4	3	3
<b>% with subject qual</b>	<b>60</b>	<b>70</b>	<b>60</b>
<b>% with subj and prof level</b>	<b>40</b>	<b>30</b>	<b>30</b>
<b>Metro East teachers</b>	16	11	11
with subject qual	13	8	7
with subj and prof level	9	4	3
<b>% with subject qual</b>	<b>81</b>	<b>73</b>	<b>64</b>
<b>% with subj and prof level</b>	<b>56</b>	<b>36</b>	<b>27</b>
<b>Section 21 school teachers</b>	21	18	18
with subject qual	15	14	13
with subj and prof level	10	6	6
<b>% with subject qual</b>	<b>71</b>	<b>78</b>	<b>72</b>
<b>% with subj and prof level</b>	<b>48</b>	<b>33</b>	<b>33</b>
<b>Non-Section 21 school teachers</b>	5	3	3
with subject qual	4	1	0
with subj and prof level	3	1	0
<b>% with subject qual</b>	<b>80</b>	<b>33</b>	<b>0</b>
<b>% with subj and prof level</b>	<b>60</b>	<b>33</b>	<b>0</b>

**Table 6.54: FET subject counts and % profiles – Tourism (contd)**

GRADE	Tourism		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	6	6	7
with subject qual	4	3	3
with subj and prof level	2	1	1
<b>% with subject qual</b>	<b>67</b>	<b>50</b>	<b>43</b>
<b>% with subj and prof level</b>	<b>33</b>	<b>17</b>	<b>14</b>
Teachers in schools <b>with fees</b>	20	15	14
with subject qual	15	12	10
with subj and prof level	11	6	5
<b>% with subject qual</b>	<b>75</b>	<b>80</b>	<b>71</b>
<b>% with subj and prof level</b>	<b>55</b>	<b>40</b>	<b>36</b>
Teachers in <b>quintile 5</b> schools	19	14	13
with subject qual	14	11	9
with subj and prof level	11	6	5
<b>% with subject qual</b>	<b>74</b>	<b>79</b>	<b>69</b>
<b>% with subj and prof level</b>	<b>58</b>	<b>43</b>	<b>38</b>
Teachers in <b>non-quintile 5</b> schools	7	7	8
with subject qual	5	4	4
with subj and prof level	2	1	1
<b>% with subject qual</b>	<b>71</b>	<b>57</b>	<b>50</b>
<b>% with subj and prof level</b>	<b>29</b>	<b>14</b>	<b>13</b>

**Table 6.55: FET subject counts and % profiles – Visual Arts**

	Visual Arts		
<b>GRADE</b>	<b>Gr 10</b>	<b>Gr 11</b>	<b>Gr 12</b>
Number of schools with Grade	8	9	11
Number of classes with teachers	11	11	24
with subject qual	10	10	23
with subj and prof level	10	10	22
Reported no. <b>learners</b> with teachers	364	251	226
with subject qual	345	226	210
with subj and prof level	345	226	198
Teachers' class size not reported	0	0	0
<b>Teachers</b>	9	10	12
with subject qual	8	9	11
with subj and prof level	8	9	10
<b>% with subject qual</b>	<b>89</b>	<b>90</b>	<b>92</b>
<b>% with subj and prof level</b>	<b>89</b>	<b>90</b>	<b>83</b>
Teachers' average age (yrs)	42	42	41
<b>Female teachers</b>	3	4	4
with subject qual	2	3	3
with subj and prof level	2	3	3
<b>% with subject qual</b>	<b>67</b>	<b>75</b>	<b>75</b>
<b>% with subj and prof level</b>	<b>67</b>	<b>75</b>	<b>75</b>
<b>Male teachers</b>	6	6	8
with subject qual	6	6	8
with subj and prof level	6	6	7
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>88</b>
<b>Eden &amp; Karoo teachers</b>	5	5	6
with subject qual	4	4	5
with subj and prof level	4	4	4
<b>% with subject qual</b>	<b>80</b>	<b>80</b>	<b>83</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>80</b>	<b>67</b>
<b>Metro East teachers</b>	4	5	6
with subject qual	4	5	6
with subj and prof level	4	5	6
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Section 21 school teachers</b>	6	7	9
with subject qual	5	6	8
with subj and prof level	5	6	7
<b>% with subject qual</b>	<b>83</b>	<b>86</b>	<b>89</b>
<b>% with subj and prof level</b>	<b>83</b>	<b>86</b>	<b>78</b>
<b>Non-Section 21 school teachers</b>	3	3	3
with subject qual	3	3	3
with subj and prof level	3	3	3
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Table 6.55: FET subject counts and % profiles – Visual Arts (contd)**

GRADE	Visual Arts		
	Gr 10	Gr 11	Gr 12
Teachers in <b>no-fee</b> schools	4	4	5
with subject qual	4	4	5
with subj and prof level	4	4	4
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>80</b>
Teachers in schools <b>with fees</b>	5	6	7
with subject qual	4	5	6
with subj and prof level	4	5	6
<b>% with subject qual</b>	<b>80</b>	<b>83</b>	<b>86</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>83</b>	<b>86</b>
Teachers in <b>quintile 5</b> schools	5	6	7
with subject qual	4	5	6
with subj and prof level	4	5	6
<b>% with subject qual</b>	<b>80</b>	<b>83</b>	<b>86</b>
<b>% with subj and prof level</b>	<b>80</b>	<b>83</b>	<b>86</b>
Teachers in <b>non-quintile 5</b> schools	4	4	5
with subject qual	4	4	5
with subj and prof level	4	4	4
<b>% with subject qual</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>% with subj and prof level</b>	<b>100</b>	<b>100</b>	<b>80</b>

### **Conclusions**

According to the information on the preceding tables, core subjects such as Afrikaans, English, isiXhosa, Geography, History, Life Sciences, Mathematics, Mathematical Literacy and Physical Sciences were mostly taught by teachers who have a major or at least a minor course in the subject they were teaching (as opposed to ‘out-of-field’ teaching). This is important as an assumption underpinning the analysis is that subject matter knowledge is key for teaching a particular subject. The proportion and percentage of teachers with a major or a minor subject *at an acceptable level of professional teaching qualification* is, however, lower (generally, approximately 20% lower). The following data on Mathematics, extracted from Table 6.49, provide an illustrative example:

	Gr 10	Gr 11	Gr 12
<b>Teachers</b>	110	105	88
with subject qual	106	100	82
with subj and prof level	77	82	63
<b>% with subject qual</b>	<b>96</b>	<b>95</b>	<b>93</b>
<b>% with subj and prof level</b>	<b>70</b>	<b>78</b>	<b>72</b>

The data suggest that the situation with regard to core subjects in the quintile 5 and non-quintile 5 schools in 2008 was not very different. Core subjects in quintile 5 and non-quintile 5 schools were mostly taught by teachers who have a major or at least a minor course in an ‘acceptable’ subject for the subject they were teaching.

Information on the tables does suggest that some subjects are unevenly offered across quintile 5 and non-quintile 5 schools. For example, the availability of subjects such as Information Technology, Computer Applications Technology, Engineering, Graphics and Design and Civil Technology, seems to be lower in non-quintile 5 schools.

***FET teachers with a first general degree and a professional qualification for teaching at secondary school level***

What struck researchers in the process of analysing data on teacher qualifications for the ESDA, was the extent to which the system prior to 1994 was designed to accommodate teachers trained for House of Assembly school (for ‘whites’), and the extent to which the discriminatory apartheid policies resulted in inequalities in the development of human resources in education. For example, researchers noted a larger reservoir of underqualified teachers amongst African and ‘coloured’ teachers and it seemed that different curricular competencies were cultivated across the different systems.

More importantly, the careers of teachers trained in education departments other than the House of Assembly (Cape Education Department) have tended to have to take a much more ‘circuitous’ route to reach an equivalent qualification level or destination. For example, whilst many ‘House of Assembly’ trained teachers currently employed had started off with a 4-year qualification, such as a 4-year Higher Diploma in Education or a 3-year degree and a 1-year Postgraduate Diploma in Education; teachers trained in other education departments had often started with a 2-year Primary Teaching Certificate (PTC) which had been upgraded slowly over time. For example, if teachers only had a Junior Certificate (Std 8) plus a PTC, they first had to complete Matric (Std 10) before they could upgrade to attain the equivalent of a 3-year Diploma in Education. They then completed a 4<sup>th</sup> year Higher Diploma in Education (HDE) or a Further Diploma in Education (FDE). In some cases this qualification was followed by a first degree, but in others it was followed, through recognition of prior learning (after a teaching certificate or diploma), by a 1-year full-time (or 2-year part-time) B Ed or a B Tech (Ed) *conversion* to a degree. The ‘unnatural’ sequence in which teachers obtained qualifications made analysis of teacher qualifications particularly challenging. Some secondary school teachers have a ‘conversion B Ed’ but do not have ‘first’ degrees. Others with general degrees have primary professional qualifications obtained prior to their degree but no secondary teaching qualifications. Other teachers have obtained a 1-year B Ed or an Advanced Certificate of Education (ACE), or other post-graduate qualification after their degree, but these post-graduate qualifications are not specifically professional ‘secondary’ teaching qualifications.

We decided to investigate the extent to which core FET (Grade 10-12) subjects were taught by teachers *with a first general degree*, and the extent to which core subjects were taught by teachers with a first general degree *as well as a professional qualification* for teaching at *secondary* school level. In other words, a distinction was made between teachers who have a secondary professional teaching qualification but not a general degree, and teachers with a ‘degreed’ secondary teaching qualification, for example, a four-year B Ed, BSc (Ed), or a first degree and a post-graduate diploma or certificate in secondary or FET teaching.

To further explore a possible association between the school-level socioeconomic status and teacher qualifications, Tables 6.56-6.65 provide comparative data (from the EQs) on the count of FET teachers in the *quintile 5* schools, and the count in *non-quintile 5* schools (i.e. quintiles 1-4 schools combined into one group), *with* a first general degree, and the count with a first general degree as well as a professional qualification for teaching at the secondary school level. (As discussed above, we had already established that core FET subjects in quintile 5 and non-quintile 5 schools were mostly taught by teachers who have a major or at least one course in an ‘acceptable’ subject).

The tables that follow provide counts and the percentages of teachers in each category for the following core subjects:

- Afrikaans (Tables 6.56a-c)
- English (Tables 6.57a-c)
- isiXhosa (Tables 6.58a-c)
- Geography (Tables 6.59a-c)
- History (Tables 6.60a-c)
- Life Sciences (Tables 6.61a-c)
- Mathematical Literacy (Tables 6.62a-c)
- Mathematics (Tables 6.63a-c)
- Physical Sciences (Table 6.64a-c)

The last tables in the set (Tables 6.65a-c) provide information for all nine of the above subjects combined.

Tables 6.56-6.65: FET teachers of core subjects *with* a first general degree, and with a first general degree and professional qualification for teaching at the secondary school level in quintile 5 and non quintile 5 schools.

Table 6.56a:Afrikaans FET: All schools

Afrikaans Degree	Sec Prof		Total
	Yes	No	
Yes	133	8	141
No	0	52	52
<b>Total</b>	133	60	193

Table 6.56b:Afrikaans FET: Quintile 1-4 schools

Afrikaans Degree	Sec Prof		Total
	Yes	No	
Yes	39	1	40
No	0	32	32
<b>Total</b>	39	33	72

Table 6.56c:Afrikaans FET: Quintile 5 schools

Afrikaans Degree	Sec Prof		Total
	Yes	No	
Yes	94	7	101
No	0	20	20
<b>Total</b>	94	27	121

Table 6.57a:English FET: All schools

English Degree	Sec Prof		Total
	Yes	No	
Yes	143	16	159
No	0	85	85
<b>Total</b>	143	101	244

Table 6.57b:English FET: Quintile 1-4 schools

English Degree	Sec Prof		Total
	Yes	No	
Yes	62	6	68
No	0	63	63
<b>Total</b>	62	69	131

Table 6.57c:English FET: Quintile 5 schools

English Degree	Sec Prof		Total
	Yes	No	
Yes	81	10	91
No	0	22	22
<b>Total</b>	81	32	113

Table 6.58a:isiXhosa FET: All schools

isiXhosa Degree	Sec Prof		Total
	Yes	No	
Yes	52	9	61
No	0	30	30
<b>Total</b>	52	39	91

Table 6.58b :isiXhosa FET: Quintile 1-4 schools

isiXhosa Degree	Sec Prof		Total
	Yes	No	
Yes	51	9	60
No	0	30	30
<b>Total</b>	51	39	90

Table 6.58c:isiXhosa FET: Quintile 5 schools

isiXhosa Degree	Sec Prof		Total
	Yes	No	
Yes	1	0	1
No	0	0	0
<b>Total</b>	1	0	1

Table 6.59a :Geography FET: All schools

Geography Degree	Sec Prof		Total
	Yes	No	
Yes	57	2	59
No	1	53	54
<b>Total</b>	58	55	113

Table 6.59b: Geography FET: Quintile 1-4 schools

Geography Degree	Sec Prof		Total
	Yes	No	
Yes	31	1	32
No	0	38	38
<b>Total</b>	31	39	70

Table 6.59c:Geography FET: Quintile 5 schools

Geography Degree	Sec Prof		Total
	Yes	No	
Yes	26	1	27
No	1	15	16
<b>Total</b>	27	16	43

**Table 6.60a:History FET: All schools**

History Degree	Sec Prof		Total
	Yes	No	
Yes	53	4	57
No	0	22	22
<b>Total</b>	<b>53</b>	<b>26</b>	<b>79</b>

**Table 6.60b:History FET: Quintile 1-4 schools**

History Degree	Sec Prof		Total
	Yes	No	
Yes	34	3	37
No	0	16	16
<b>Total</b>	<b>34</b>	<b>19</b>	<b>53</b>

**Table 6.60c:History FET: Quintile 5 schools**

History Degree	Sec Prof		Total
	Yes	No	
Yes	19	1	20
No	0	6	6
<b>Total</b>	<b>19</b>	<b>7</b>	<b>26</b>

**Table 6.61a:Life Sciences FET: All schools**

Life Sciences Degree	Sec Prof		Total
	Yes	No	
Yes	64	6	70
No	1	69	70
<b>Total</b>	<b>65</b>	<b>75</b>	<b>140</b>

**Table 6.61b:Life Sciences FET: Quintile 1-4 schools**

Life Sciences Degree	Sec Prof		Total
	Yes	No	
Yes	22	4	26
No	0	48	48
<b>Total</b>	<b>22</b>	<b>52</b>	<b>74</b>

**Table 6.61c:Life Sciences FET: Quintile 5 schools**

Life Sciences Degree	Sec Prof		Total
	Yes	No	
Yes	42	2	44
No	1	21	22
<b>Total</b>	<b>43</b>	<b>23</b>	<b>66</b>

**Table 6.62a:Mathematics Literacy FET: All schools**

Mathematical Literacy Degree	Sec Prof		Total
	Yes	No	
Yes	88	8	96
No	0	86	86
<b>Total</b>	<b>88</b>	<b>94</b>	<b>182</b>

**Table 6.62b:Mathematics Literacy FET: Quintile 1-4 schools**

Mathematical Literacy Degree	Sec Prof		Total
	Yes	No	
Yes	32	5	37
No	0	60	60
<b>Total</b>	<b>32</b>	<b>65</b>	<b>97</b>

**Table 6.62c:Mathematics Literacy FET: Quintile 5 schools**

Mathematical Literacy Degree	Sec Prof		Total
	Yes	No	
Yes	56	3	59
No	0	26	26
<b>Total</b>	<b>56</b>	<b>29</b>	<b>85</b>

**Table 6.63a:Mathematics FET: All schools**

Mathematics	Sec Prof		Total
	Yes	No	
Degree	79	15	94
Yes	0	73	73
No	79	88	167
Total			

**Table 6.64a:Physical Sciences FET: All**

Physical Sciences	Sec Prof		Total
	Yes	No	
Degree	60	7	67
Yes	0	40	40
No	60	47	107
Total			

**Table 6.65a:All core FET subjects: All Schools**

All subjects	Sec Prof		Total
	Yes	No	
Degree	828	103	931
Yes	2	630	632
No	830	733	1563
Total			

**Table 6.63b:Mathematics FET: Quintile 1-4 schools**

Mathematics	Sec Prof		Total
	Yes	No	
Degree	26	8	34
Yes	0	57	57
No	26	65	91
Total			

**Table 6.64b: Physical Sciences FET: Quintile 1-4 schools**

Physical Sciences	Sec Prof		Total
	Yes	No	
Degree	28	5	33
Yes	0	34	34
No	28	39	67
Total			

**Table 6.65b: All core FET subjects: Quintile 1-4 schools**

All subjects	Sec Prof		Total
	Yes	No	
Degree	370	48	418
Yes	0	436	436
No	370	484	854
Total			

**Table 6.63c:Mathematics FET: Quintile 5 schools**

Mathematics	Sec Prof		Total
	Yes	No	
Degree	53	7	60
Yes	0	16	16
No	53	23	76
Total			

**Table 6.64c: Physical Sciences FET: Quintile 5 schools**

Physical Sciences	Sec Prof		Total
	Yes	No	
Degree	32	2	34
Yes	0	6	6
No	32	8	40
Total			

**Table 6.65c: All core FET subjects: Quintile 5 schools**

All subjects	Sec Prof		Total
	Yes	No	
Degree	458	55	513
Yes	2	194	196
No	460	249	709
Total			

Data on the above tables suggest that a larger proportion of FET teachers in quintile 5 schools have a first general degree, or a first general degree and secondary teaching qualification, than the proportion in non-quintile 5 schools (i.e. quintiles 1-4 combined). For example:

- Of 167 teachers teaching FET *Mathematics*, 94 (56%) have first degrees, 79 of these 94 teachers have first degrees and secondary professional qualifications. 73 (44%) of the 167 FET Mathematics teachers have secondary teaching qualifications but no first degree (Table 6.63a).
- Of the 91 teachers teaching FET *Mathematics* in *quintile 1-4 schools*, 34 (31%) have first degrees. 26 of these 34 teachers with first degrees have secondary professional qualifications as well. 57 (63%) of the 91 FET Mathematics teachers have secondary teaching qualifications but no first degree. (Table 6.63b).
- Of the 76 teachers teaching FET *Mathematics* in *quintile 5 schools*, 60 (79%) have first degrees. 53 of these 60 teachers have first degrees and secondary professional qualifications. 16 (21%) of the 76 teachers have secondary teaching qualifications but no first degree. (Table 6.63c).
- 40 (56%) of the 72 teachers teaching FET *Afrikaans* in *quintile 1-4 schools* have first degrees. 101 (83%) of the 121 teachers teaching Afrikaans in *quintile 5 schools* have first degrees. (Tables 6.56b and c)
- 26 (35%) of the 74 FET *Life Sciences* teachers in *quintile 1-4 schools* have first degrees. 44 (67%) of 66 FET Life Sciences teachers in *quintile 5 schools* have a first degree. (Tables 6.62b and c).

Also of interest is that data indicate that there were 90 teachers teaching FET isiXhosa in quintile 1-4 schools and only one in the quintile 5 schools.

### ***Conclusions***

Data suggest that a greater proportion of FET teachers with a first general degree, and with a first general degree and secondary qualifications are teaching in quintile 5 schools than in non-quintile 5 schools (i.e. quintiles 1-4 combined). This implies inequity in the distribution between higher-poverty and the most affluent schools of teachers with first general degrees teaching core subjects at the FET level, and signals that less specialised teachers are teaching core FET subjects in quintile 1-4 schools.<sup>33</sup>

Data (from the EQs) on the subjects specialisations, that teachers teaching within their field of expertise more commonly have, for teaching the ‘newer’ or more work-related FET subjects indicate that:

---

<sup>33</sup> Comparative data on the urban and rural district is provided in Tables 6.66-6.75 in Appendix G.

- teachers teaching Agricultural Sciences more commonly have Biology than Agricultural Sciences
- teachers teaching Civil Technology more commonly have Computer Applications Technology than Technical/Building Drawing
- teachers teaching Computer Applications Technology more commonly have Typing than Computer Studies/Information Technology
- teachers teaching Consumer Studies more commonly have Business Economics/Economics, and then Needlework or Home Economics, rather than Business Studies/Marketing
- teachers teaching Dance Studies more commonly have Human Movement Studies than Dance *per se*
- teachers teaching Design more commonly have Art than Graphic Art/Art Design
- teachers teaching Engineering, Graphics and Design more commonly have Technology (in general) than Technical/Engineering Drawing or Design Technology
- teachers teaching Information Technology more commonly have Information Literacy than Information Technology or Computer Studies
- teachers teaching Life Sciences most commonly have Biology
- teachers teaching Life Orientation most commonly have Bible Studies, then Psychology/Guidance before Physical Education
- teachers teaching Mechanical Technology more commonly have Technology (in general) than Mechanical Technology or Engineering Technology
- teachers teaching Religion Studies more commonly have Bible Studies or Scripture than *Religion Studies*
- teachers teaching Tourism more commonly have History than Geography
- teachers teaching Visual Arts more commonly have Art (Practical) than Art Design.

Finally, a constraint that should be mentioned regarding the analysis of teacher qualification data in the South African context is that of equating teachers' qualifications. Because of the fragmented and uneven education system that existed in apartheid South Africa, there were probably variations in the quality of teacher education programmes offered in the different teacher education institutions where teachers received their training.<sup>34</sup>

---

<sup>34</sup> A pilot study on a sample of Grade 6 Mathematics lessons in 40 primary schools in Gauteng (Carnoy et al, 2008 in the literature review) found that the type of teacher education institution attended (university, urban or former homeland college of education) mattered most in terms of learner achievement; i.e. the quality of teacher training offered by the institution was probably a key variable.

Table 6.76 provides the names of the institutions operating in South Africa (not only teacher education institutions) where the sample of teachers obtained qualifications. The table provides the number of qualifications obtained per institution from the most frequent to the least frequent institutions. Although some teachers in the sample had no post-school qualifications, most teachers reported having obtained more than one qualification.

**Table 6.76: Institutions where teachers obtained their qualifications and counts of qualifications per institution**

<b>Institution</b>	<b>Number of qualifications</b>
University of the Western Cape	1578
Stellenbosch University	918
South Cape College of Education	565
Bellville College of Education	445
University of South Africa	292
Cape Peninsula University of Technology	291
Good Hope College of Education	238
Roggebaai College of Education	206
University of Cape Town	206
Western Cape College of Education	171
Peninsula Technikon	169
Hewat College of Education	167
University of Pretoria	159
University of Port Elizabeth	155
University of the Free State	136
Sohnge College of Education	129
Dower College of Education	113
Cape College of Education (Fort Beaufort)	112
Nelson Mandela Metropolitan University	92
Cape Town College of Education	91
Oudtshoorn College of Education	90
Cape Technikon	83
North-West University	79
Rand Afrikaans University	79
Zonnebloem College of Education	78
Potchefstroom University	76
Masibulele College of Education	71
Wellington College of Education	69
Athlone College of Education	65
Paarl College of Education	65
Vista University	63
Boland College of Education	59
Algoa College of Education	53
Perseverance College of Education	53
Dr W B Rubusana College of Education	43
University of Fort Hare	43
Griffiths Mxenge College of Education	40
Onderwyskollege Pretoria	34
Port Elizabeth Technikon	34
Lennox Sebe College of Education	33
University of Transkei	33

**Table 6.76: Institutions where teachers obtained their qualifications and counts of qualifications per institution (contd)**

<b>Institution</b>	<b>Number of qualifications</b>
Denneoord College of Education	29
Rhodes University	28
Graaff Reinet College of Education	25
Westley College of Education	24
Battswood College of Education	23
College of Education of South Africa (CESA)	23
Butterworth College of Education	22
Bloemfontein College of Education	21
University of Witwatersrand	19
Potchefstroom College of Education	18
Clarkbury College of Education	16
College of Education and Health at Rand Afrikaans University	16
Lumko College of Education	16
Transkei College of Education	16
Johannesburg College of Education	15
Lovedale College of Education	15
Bensonvale College of Education	14
Pretoria College of Education	14
Arthur Tsengiwe College of Education	13
Goudstad College of Education	13
Cicira College of Education	12
Mount Arthur College of Education	12
Central University of Technology	11
Northlink FET College	11
Durban College of Education	10
Port Elizabeth College of Education	10
Success College	10
University of Johannesburg	10
Barkley House Pre-Primary Teachers' Training College	9
St Augustine College of South Africa	9
Technikon Pretoria	9
Walter Sisulu University for Technology and Science	9
Athlone Technical College	8
Boland FET College	8
Technikon SA	8
Tshwane University of Technology	8
Cape Town Technical College	7
Protea College, Bellville	7
Shawbury College of Education	7
Durban University of Technology	6
Maluti College of Education	6
Oudtshoorn College	6
Bethel College of Education	5
George College	5
Paarl College	5
Sally Davies Pre-Primary Teachers' Training College	5
Technisa/Technical College of South Africa	5
University of Natal (Pietermaritzburg)	5
College for Continuing Education (DET)	4

**Table 6.76: Institutions where teachers obtained their qualifications and count of qualifications per institution (contd)**

<b>Institution</b>	<b>Number of qualifications</b>
College of Cape Town FET College	4
Natal College of Education	4
Royal Academy of Dance (RAD)	4
Umlazi College for Further Education	4
Appelbosch College of Education	3
Border Technikon	3
Damelin College	3
Esikhawini College of Education	3
Hebron College of Education	3
Madadeni College of Education	3
Phatsimang College of Education	3
Rand College of Education	3
Royal Schools of Music	3
South Cape FET College	3
Springfield College of Education	3
Stellenbosch College	3
Trinity College, London (TLC)	3
Tshiya College of Education	3
Tygerberg College	3
University of Durban-Westville	3
Academy of Learning	2
Azaliah College	2
Bethel College	2
Durban Institute of Technology	2
Edgewood College of Education	2
Lyceum College	2
Mapulaneng College of Education	2
Moretele College of Education	2
Mpumalanga Institute for Higher Education	2
Sivuyile College	2
Soweto College of Education	2
St Francis (Langa)	2
Technikon Witwatersrand	2
Trinity College of Music, England	2
University of Natal (Durban)	2
University of Surrey	2
University of Zululand	2
Worcester College	2
Adams College of Education	1
Allenby Campus	1
Business Management Training College of Southern Africa	1
Cambridge Tutorial College International	1
Cape College for Vocational Education	1
Clydesdale College of Education	1
Dr C N Phatudi College of Education	1
East Rand College of Education	1
Eastern Cape Technikon	1
Eshowe College of Education	1
Executive Education	1

**Table 6.76: Institutions where teachers obtained their qualifications and count of qualifications per institution (contd)**

<b>Institution</b>	<b>Number of qualifications</b>
Ezakheni College of Education	1
False Bay FET College	1
Good Hope College (satellite to S Peninsula)	1
Grahamstown Training College	1
Helderberg College	1
ICI University College	1
Imperial Society of Teachers of Dancing (ISTD), England	1
Indumiso College of Education	1
INTEC College	1
Johannesburg Art Foundation	1
Kathorius College of Education	1
Kwagwqikazi College of Education	1
Kwena Moloto College of Education	1
Lehurutshe College of Education	1
Lemana College of Education	1
Lera La Tsepe	1
Mamokgalake College of Education	1
Mfundisweni College of Education	1
Mgwenya College of Education	1
Northwest In-Service Teacher Training Centre	1
Northwest Technikon	1
Ntuzuma College of Education	1
Sefikeng College of Education	1
Sigcau College of Education	1
Technikon Natal	1
Thaba Nchu College of Education	1
Transvaal College of Education (Laudium)	1
University of Kwazulu-Natal	1
University of the North	1
Vaal University of Technology	1
Varsity College	1
West Coast FET College	1

Data in the Table 6.76 show that the current teaching force obtained qualifications from a wide range of institutions. Data suggest that the largest count is of qualifications obtained at the University of the Western Cape (1 578), followed by the count of qualifications obtained at the University of Stellenbosch (918), and then by the count of those obtained at the South Cape College of Education (565).

Chapter 7 discusses findings on teacher retention, attrition, turnover, recruitments, replacements, and difficult to fill posts by learning area specialisations and subject.



## CHAPTER 7: TEACHER RETENTION, ATTRITION, SHORTAGES, NEW ENTRANTS, AND POTENTIAL TEACHING STOCK

Section 7.1 of Chapter 7 uses data from the Educator Questionnaire on the number of teachers in different age groups by demographic information, such as gender and population group, and experience, to explore dynamics around teacher retention, attrition, and new appointments (younger teachers first joining the system).

### 7.1 Age of present teaching stock

#### 7.1.1 Age by gender

Table 7.1 below provides the number of teachers in different age groups and the number of male and female teachers in the sample by age group (according to data from the EQs):

**Table 7.1: Number of male and female teachers by age group**

Age	Female	Male	Missing	Total
19-29	211	80		291
30-39	867	392	3	1262
40-49	1146	657	8	1811
50-59	721	311	7	1039
60-65	74	41		115
66+	8	7		15
<b>Total</b>	<b>3027</b>	<b>1488</b>	<b>18</b>	<b>4533*</b>

\* 12 teachers did not provide their age.

Table 7.1 indicates that, for the sample as a whole that:

- There are twice as many female teachers (3 027) as there are male teachers (1 488).
- The largest proportion of teachers is in the 40-49 age group (1 811 or 40%), followed by the 30-39 age group (1 262 or 28%) and then the 50-59 age group (1 039 or 23%). This pattern holds for both male teachers and female teachers. Figures suggest that there is a 'peak' of teachers in the 40-49 age group, and attrition amongst teachers of both genders in their 50s.
- 291 (6%) out of a total of 4 533 teachers are in the **19-29 age group** as compared to 1 262 (28%) in the 30-39 year age group. 211 (7%) out of a total of 3 027 **female** teachers, are in the 19-29 age group as compared to 867 (29%) in the 30-39 year age group. 80 (5%) out of a total of 1 488 **male** teachers are in the 19-29 age group as compared to 392 (26%) in the 30-39 age group. This age profile suggests that, in the last ten years, there are fewer teachers (of both genders) in their 20s being employed or choosing to join the teaching force. (Most newly qualified teachers are at least 22, having completed a four years' training after school but the low proportion is still noteworthy.)

Tables 7.2 and 7.3 show figures for the *rural* and *urban* Education Districts.

**Table 7.2: Eden and Central Karoo – Number of male and female teachers by age group**

Age	Female	Male	Missing	Total
19-29	61	29		90
30-39	324	164	1	489
40-49	498	320	4	822
50-59	365	182	2	549
60-65	44	24		68
66+	5	3		8
<b>Total</b>	<b>1297</b>	<b>722</b>	<b>7</b>	<b>2026</b>

\* 1 teacher did not provide his/her age.

**Table 7.3: Metro East – Number of male and female teachers by age group**

Age	Female	Male	Missing	Total
19-29	150	51		201
30-39	543	228	2	773
40-49	648	337	4	989
50-59	356	129	5	490
60-65	30	17		47
66+	3	4		7
<b>Total</b>	<b>1730</b>	<b>766</b>	<b>11</b>	<b>2507*</b>

\*11 teachers did not provide their age.

- Table 7.2 indicates that in the *rural* Education District (Eden and Central Karoo) there are 1 297 female teachers as compared to 722 male teachers. Table 7.3 indicates that in the *urban* district (Metro East) there are more than double the number of female teachers (1 730) compared to male teachers (766). This contrast suggests that the proportion of teachers who are male is higher in the rural district than the proportion of teachers who are male in the urban district.
- The largest proportion of teachers overall in the *urban* district is in the 40-49 age group (39%), followed by the 30-39 age group (31%), and then the 50-59 age group (20%). In the *rural* education district, the largest proportion of teachers overall is also in the 40-49 age group (41%), but this group is followed by the 50-59 age group (27%), and then the 30-39 age group (24%). This pattern suggests that attrition amongst teachers in their 50s (for example, through early retirement) is slightly higher in the urban district than in the rural district.
- Table 7.2 indicates that, in the *rural* district, the largest proportion of *female* teachers is in the 40-49 age group (38%), followed by the 50-59 age group (28%) and then the 30-39 age group (25%). However, in the *urban* district (Table 7.3) the largest proportion of *female* teachers is in the 40-49 age group (37%), followed by the 30-39 age group (31%) and then the 50-59 age group (21%). In the *rural* Education District the largest proportion

of *male* teachers is in the 40-49 age group (44%), this group is followed by the 50-59 age group (25%), and then the 30-39 age group (23%). The largest proportion of *male* teachers in the *urban* district is also in the 40-49 year age group (44%), but is followed by the 30-39 year age group (30%), and then the 50-59 year age group (17%). This pattern suggests that attrition amongst both male and female teachers in their 50s is slightly higher in the urban district than in the rural district.

- In the *urban* district 201 (8%) out of a total of 2 507 teachers are in the 19-29 age group as compared to 773 (31%) in the 30-39 age group. In the *rural* district 90 (4%) out of a total of 2 026 teachers are in the 19-29 age group as compared to 489 (24%) in the 30-39 age group. This pattern suggests that the proportion of teachers in the 19-29 age group is slightly higher in the urban district than the proportion in the rural district.
- In the *urban* district, 150 (9%) out of a total of 1 730 *female* teachers are in the 19-29 age group as compared to 543 (31%) in the 30-39 age group. In the *rural* district 61 (5%) out of a total of 1 297 *female* teachers are in the 19-29 age group as compared to 324 (25%) in the 30-39 age group. In the *urban* district 51 (7%) out of a total of 766 *male* teachers are in the 19-29 age group as compared to 228 (30%) in the 30-39 age group. In the *rural* district 29 (4%) out of a total of 722 *male* teachers are in the 19-29 age group as compared to 164 (23%) in the 30-39 age group. This pattern suggests that the proportion of both the male and the female teachers in the 19-29 year age group is slightly higher in the urban district than the proportion in the rural district.

### 7.1.2 Age by population group

The table below provides the number of teachers per age group by different population groups.

**Table 7.4: Number of teachers per age group by population group**

Age	Population group						Total
	African	Coloured	Indian/ Asian	White	Other	Missing	
20-29	80	45	1	160	1	4	291
30-39	648	459	1	131	5	18	1262
40-49	605	831	5	341	4	25	1811
50-59	165	526	1	323	3	21	1039
60-65	7	45		62		1	115
66+		5		9		1	15
<b>Total</b>	<b>1505</b>	<b>1911</b>	<b>8</b>	<b>1026</b>	<b>13</b>	<b>70</b>	<b>4533*</b>

\* 12 teachers did not provide their age.

Emerging from the data in Table 7.4 is that:

- The largest proportion of *white* teachers is in the 40-49 age group (341 or 33%), followed by the 50-59 age group (323 or 31%) and then the 19-29 age group (160 or 16%). Of interest is that the 19-29 age group is larger than the 30-39 age group (131 or 13%).
- The largest proportion of *coloured* teachers is also in the 40-49 age group (831 or 43%), followed by the 50-59 age group (526 or 28%), but then by the 30-39 age group (459 or 24%). Of interest is that the number of teachers in the 19-29 age group is only 45 (2% of the total).
- Unlike the other main two population groups, the largest proportion or ‘peak’ of *African* teachers is in the 30-39 age group (648 or 43%), followed by the 40-49 age group (605 or 40%), and then by the 50-59 age group (165 or 11%). The number of African teachers in the 19-29 age group is only 80 (5% of the total).
- 7% of the white population group are in the *60+ age group* as compared to 3% of the coloured group and 0.5% of the African group. This pattern suggests that a higher proportion of white teachers are remaining in teaching after the age of 60.

Table 7.5 shows data for the rural district and Table 7.6 for the urban district.

**Table 7.5: Eden and Central Karoo – Number of teachers per age group by population group**

Age	Population group						Total
	African	Coloured	Indian/ Asian	White	Other	Missing	
20-29	6	21		61		2	90
30-39	168	263		54	2	2	489
40-49	175	467	2	170	1	7	822
50-59	37	356		148	2	6	549
60-65	3	29		36			68
66+		3		5			8
<b>Total</b>	<b>389</b>	<b>1139</b>	<b>2</b>	<b>474</b>	<b>5</b>	<b>17</b>	<b>2026*</b>

\* 1 teacher did not provide his/her age.

**Table 7.6: Metro East – Number of teachers per age group by population group**

Age	Population group						Total
	African	Coloured	Indian/ Asian	White	Other	Missing	
20-29	74	24	1	99	1	2	201
30-39	480	196	1	77	3	16	773
40-49	430	364	3	171	3	18	989
50-59	128	170	1	175	1	15	490
60-65	4	16		26		1	47
66+		2		4		1	7
<b>Total</b>	<b>1116</b>	<b>772</b>	<b>6</b>	<b>552</b>	<b>8</b>	<b>53</b>	<b>2507</b>

\* 11 teachers did not provide their age.

Emerging from the data in Tables 7.5 and 7.6 is that:

- In the **urban** district the African population group forms the largest proportion of teachers (1 116 or 41%), followed by the coloured population group (772 or 31%), and then by the white group (552 or 22%). In the **rural** district the largest proportion is the coloured population group (1 139 or 56%), followed by the white group (474 or 23%), and then the African group (389 or 19%).
- In the **rural** district (Eden and Central Karoo), the largest proportion of white teachers is in the 40-49 age group (170 or 36%), followed by the 50-59 age group (148 or 31%) and then the 19-29 age group (61 or 13%). The 19-29 age group is larger than the 30-39 age group (54 or 11%). In the **urban** district (Metro East) the largest proportion of **white** teachers is in the 50-59 age group (175 or 32%), followed by the 40-49 age group (171 or 31%) and then the 19-29 age group (99 or 18%). The proportion of the 19-29 age group in the white population group is also larger than the 30-39 age group (77 or 14%). This suggests less attrition amongst white teachers in their 50s, but younger teachers may be replacing older teachers as they leave or retire.
- In the **urban** district (Table 7.6) the largest proportion of the **coloured** population group is in the 40-49 age group (364 or 47%), followed by the 30-39 age group (196 or 25%) but then by the 50-59 age group (170 or 22%). This suggests attrition amongst teachers in their 50s. The proportion of teachers in the 19-29 age group (24 or 3%) in the **urban** district is much smaller than the proportion in the 30-39 age group. This suggests that fewer coloured teachers in their 20s are being employed in urban schools. In the **rural** district (Table 7.5) the largest proportion of coloured teachers is also in the 40-49 age group (467 or 41%), but this is followed by the 50-59 age group (356 or 31%) and then by the 30-39 age group (263 or 23%). Of interest is that the number of teachers in the 19-29 age group is only 21 (2% of the total) and that the proportion of teachers from the age of 60+ (32 or 3%) is greater than the proportion of teachers in the 19-29 age group.
- In the **urban** district the largest proportion of **African** teachers is in the 30-39 age group (480 or 43%), followed by the 40-49 age group (430 or 39%) and then by the 50-59 age group (128 or 11%). This suggests higher attrition levels amongst the 50-59 age group. The proportion of African teachers in the 19-29 age group (74 or 7%) is smaller than the proportion in the 30-39 age group. However, in the **rural** district the largest proportion of African teachers is in the 40-49 age group (175 or 45%), this is followed by the 30-39 age group (168 or 43%), and then by the 50-59 age group (37 or 10%). The proportion of teachers in the 19-29 age group is only 6 (2%).
- In the **urban** district 30 (6%) of the white population group are in the 60+ age group as compared to 18 (2%) of the coloured group and 4 (0.4%) of the African group. In the

*rural* district 41 (9%) of the white population group are in the 60+ age group as compared to 32 (3%) of the coloured group and 3 (0.8%) of the African group. This suggests that, in both the rural and urban district, more white teachers of 60+ years of age are remaining in teaching.

### 7.1.3 Age by home language

The EQ asked teachers to report on the language/s they most speak at home. Some teachers reported that they speak more than one language at home. As the three main official language/s of instruction (LOI) in Western Cape are the main concern, the analysis focused on information on teachers who said they spoke English, Afrikaans and/or isiXhosa at home.

Tables 7.7-7.15 report the number for each language for the whole sample, then the number of Eden and Central Karoo, followed by the number for Metro East.

#### Tables 7.7-7.9: Number of teachers per age group with isiXhosa as home language

Table 7.7: Whole sample

isiXhosa			
Age	No	Yes	Total
20-29	222	69	291
30-39	647	615	1262
40-49	1250	561	1811
50-59	888	151	1039
60-65	109	6	115
66+	15		15
<b>Total</b>	<b>3131</b>	<b>1402</b>	<b>4533</b>

Table 7.8: Eden & Central Karoo

isiXhosa			
Age	No	Yes	Total
20-29	84	6	90
30-39	325	164	489
40-49	661	161	822
50-59	518	31	549
60-65	66	2	68
66+	8		8
<b>Total</b>	<b>1662</b>	<b>364</b>	<b>2026</b>

Table 7.9: Metro East

isiXhosa			
Age	No	Yes	Total
20-29	138	63	201
30-39	322	451	773
40-49	589	400	989
50-59	370	120	490
60-65	43	4	47
66+	7		7
<b>Total</b>	<b>1469</b>	<b>1038</b>	<b>2507</b>

#### Tables 7.10-7.12: Number of teachers per age group with English as home language

Table 7.10: Whole sample

English			
Age	No	Yes	Total
20-29	211	80	291
30-39	939	323	1262
40-49	1371	440	1811
50-59	819	220	1039
60-65	85	30	115
66+	11	4	15
<b>Total</b>	<b>3436</b>	<b>1097</b>	<b>4533</b>

Table 7.11: Eden & Central Karoo

English			
Age	No	Yes	Total
20-29	73	17	90
30-39	409	80	489
40-49	686	136	822
50-59	463	86	549
60-65	56	12	68
66+	7	1	8
<b>Total</b>	<b>1694</b>	<b>332</b>	<b>2026</b>

Table 7.12: Metro East

English			
Age	No	Yes	Total
20-29	138	63	201
30-39	530	243	773
40-49	685	304	989
50-59	356	134	490
60-65	29	18	47
66+	4	3	7
<b>Total</b>	<b>1742</b>	<b>765</b>	<b>2507</b>

**Tables 7.13-7.15: Number of teachers per age group with Afrikaans as home language**

**Table 7.13: Whole sample**

Afrikaans			
Age	No	Yes	Total
20-29	108	183	291
30-39	721	541	1262
40-49	772	1039	1811
50-59	264	775	1039
60-65	24	91	115
66+	2	13	15
<b>Total</b>	<b>1891</b>	<b>2642</b>	<b>4533</b>

**Table 7.14: Eden & Central Karoo**

Afrikaans			
Age	No	Yes	Total
20-29	13	77	90
30-39	177	312	489
40-49	217	605	822
50-59	76	473	549
60-65	10	58	68
66+		8	8
<b>Total</b>	<b>1694</b>	<b>332</b>	<b>2026</b>

**Table 7.15: Metro East**

Afrikaans			
Age	No	Yes	Total
20-29	95	106	201
30-39	544	229	773
40-49	555	434	989
50-59	188	302	490
60-65	14	33	47
66+	2	5	7
<b>Total</b>	<b>1742</b>	<b>765</b>	<b>2507</b>

Data in Tables 7.7-7.15 show that:

- 2 642 teachers said that Afrikaans is a home language
- 1 402 teachers said that isiXhosa is a home language
- 1 097 teachers said that English is a home language
- the number of teachers in the Eden and Central Karoo sample who said that *isiXhosa* is a home language is 364, as opposed to 1 038 in the Metro East sample.

Data in Tables 7.7-7.9 suggest that the largest proportion of teachers with *isiXhosa* as a home language is in the **30-39 age group**. This pattern holds for the sample as a whole, and for both the rural and the urban Education Districts. A much smaller proportion is in the **19-29 age group** (5%) of the sample as a whole, and for both the rural (2%) and the urban (6%) Education Districts.

In contrast, data in Tables 7.10-7.15 suggest that the largest proportion of teachers with *English* and the largest proportion of teachers with *Afrikaans* as a home language, are in the **40-49 age group**. This pattern holds for the sample as a whole, and for both the rural and the urban Education Districts. Data also indicate that the proportion of teachers with *Afrikaans* as a home language in the **49-49 age group** is almost double the proportion in the **30-39 age group**.

The percentage of teachers with *Afrikaans* as a home language in the **19-29 age group** of the sample as a whole, and of the rural and the urban Education Districts is 4%. The percentage of teachers with *English* as a home language in the 19-29 age group of the whole sample is 7%; for the rural district it is 5% and, for the urban district it is 8%.

Data in Tables 7.7, 7.10 and 7.13 suggest that in the sample, the count of the teachers with Afrikaans as a home language who are 60+ is 104 (4%). The count of the teachers with English as

a home language who are 60+ is 34 (3%). The count of the teachers with isiXhosa as a home language who are 60+ is only 6 (0.4%).

#### 7.1.4 Age by years teaching experience

Table 7.16 below provides the number of teachers per age group by years teaching experience.

**Table 7.16: Number of teachers per age group by years teaching experience**

Age	Years teaching						Missing	Total
	<1yr	1-2yrs	3-5yrs	6-10yrs	11-15yrs	>16yrs		
20-29	41	105	120	23	1		1	291
30-39	18	60	190	397	416	179	2	1262
40-49	8	11	50	150	263	1321	8	1811
50-59	1	2	4	21	43	962	6	1039
60-65					4	111		115
66+	1					14		15
<b>Total</b>	<b>69</b>	<b>178</b>	<b>364</b>	<b>591</b>	<b>727</b>	<b>2587</b>	<b>17</b>	<b>4533</b>

\* 12 teachers did not provide their age.

Data in Table 7.16 show that:

- The largest proportion of teachers has more than 16 years experience (2 587 or 57%), followed by teachers with 11-15 years experience (727 or 16%), and then by teachers with 6-10 years experience (591 or 13%). This pattern suggests that more than half of the sample teachers have more than 16 years experience.
- The largest proportion of teachers with *more than 16 years experience* are in the 40-49 age group (1 321 or 51%), followed by teachers in the 50-59 age group (961 or 37%), and then by teachers in the 30-39 age group (179 or 7%).

Table 7.17 provides figures for the *rural* district and Table 7.18 provides figures for the *urban* district.

**Table 7.17: Eden and Central Karoo – Number of teachers per age group by years teaching experience**

Age	Years teaching						Missing	Total
	<1yr	1-2yrs	3-5yrs	6-10yrs	11-15yrs	>16yrs		
20-29	14	38	34	4				90
30-39	5	20	59	136	177	92		489
40-49	2	1	22	51	86	658	2	822
50-59		1	1	5	12	530		549
60-65					2	66		68
66+	1					7		8
<b>Total</b>	<b>22</b>	<b>60</b>	<b>116</b>	<b>196</b>	<b>277</b>	<b>1353</b>	<b>2</b>	<b>2026*</b>

\* 1 teacher did not provide his/her age.

**Table 7.18: Metro East – Number of teachers per age group by years teaching experience**

Age	Years teaching						Missing	Total
	<1yr	1-2yrs	3-5yrs	6-10yrs	11-15yrs	>16yrs		
20-29	27	67	86	19	1		1	201
30-39	13	40	131	261	239	87	2	773
40-49	6	10	28	99	177	663	6	989
50-59	1	1	3	16	31	432	6	490
60-65					2	45		47
66+						7		7
<b>Total</b>	<b>47</b>	<b>118</b>	<b>248</b>	<b>395</b>	<b>450</b>	<b>1234</b>	<b>15</b>	<b>2507</b>

\* 11 teacher did not provide their age.

What emerges from Tables 7.17 and 7.18 is that:

- In the *rural* district, the largest proportion of teachers has more than 16 years experience (1 353), followed by teachers with 11-15 years experience (277), and then by teachers with 6-10 years experience (196). In the *urban* district, the largest proportion of teachers also has more than 16 years experience (1 234), followed by teachers with 11-15 years experience (450), and then by teachers with 6-10 years experience (395).
- In the *rural* district, the largest proportion of teachers with *more than 16 years experience* are in the 40-49 age group (658 or 49%), followed by teachers in the 50-59 age group (530 or 39%), and then by teachers in the 30-39 age group (92 or 7%). In the *urban* district, the largest proportion of teachers with more than 16 years experience is also in the 40-49 age group (663 or 54%), followed by teachers in the 50-59 age group (432 or 35%), and then by teachers in the 30-39 age group (87 or 7%).

### 7.1.5 Summary

Data suggest that:

- The largest proportion of the white and coloured population groups of teachers are in the 40-49 age group, whilst the largest proportion of African teachers overall and in the urban district is in the 30-39 age group.
- More than 50% of the sample teachers have more than 16 years experience, but the largest proportion of teachers with more than 16 years experience is in the *40-49 age group* (1 811 or 40%). Most highly qualified teachers and most of the ‘most experienced’ teachers are in their 40s – two factors that normally play a significant role in employment decisions (and, by implication teacher demand).
- There is attrition amongst teachers of both genders in the *50-59 age group*, and this attrition is higher amongst males. Attrition amongst teachers of both genders in their 50s is slightly higher in the urban district than in the rural district.

- A higher proportion of white teachers are remaining in teaching after the age of 60. A higher proportion of teachers with Afrikaans as a home language are remaining in teaching after the age of 60.
- Only a small proportion of teachers employed are in the *19-29 age group*, indicating a fairly low rate of younger teachers entering the system.

## 7.2 Teacher retention, attrition, turnover, recruitments, replacements, and difficult to fill posts by learning area and subject

Section 7.2 provides other information, mainly from the School Surveys, that relates to teacher retention, attrition, recruitments, replacements, shortages, and difficult to fill posts by learning area specialisations and subject.

### 7.2.1 Retention

The Educator Questionnaire asked the sample of 4 545 teachers how long they had been teaching at the school where they currently teach. Table 7.19 summarises this information.

**Table 7.19: Teachers' number of years at current school**

	Number	Percentage
Less than 1 year	411	9
1-2 years	545	12
3-5 years	740	16
6-10 years	745	16
11-15 years	701	15
More than 15 years	1297	29
Missing	106	2
Total	4545	100

Data show that around 60% of the sample of teachers said they have been teaching at the same school for more than five years, indicating that over half the teachers are remaining at the same schools for five years or more years.

In the EQ, teachers were asked whether, since being appointed at the school where they currently teach, they had actively applied for positions at other schools. Table 7.20 reflects the responses.

**Table 7.20: Number of teachers who said they have actively applied for positions at other schools**

	<b>Number</b>	<b>Percentage</b>
Yes	1117	25
No	3054	67
Prefer not to answer	228	5
Missing	146	3
Total	4545	100

67% of the sample of teachers indicated that they have not actively applied for other teaching positions. Although some of these responses could reflect ‘desirable’ attitudes, this seems unlikely. Other respondents either did not respond, or chose the ‘prefer not to answer’ option. Data suggest that more than half of the sample is not applying for posts in other schools.

What requires further investigation is whether teachers, who reported that they have been teaching at the same school for more than five years, or who said they have actively applied for teaching positions at other schools, are currently based in higher poverty (quintiles 1-4) or more affluent (quintile 5) schools. What also needs to be established is which of these are good teachers, and what motivates good teachers to remain at the same school, especially higher-poverty schools.

### **7.2.2 Attrition and turnover**

The School Survey asked principals to provide the number of permanent WCED-paid teachers who left their school permanently between January 2007 and August 2008; the total number reported was 1 016 teachers for the sample of 641 schools (comprising 144 of the sample schools visited by fieldworkers and 497 of the schools that responded to the bulk email/posted survey). Principals were also asked to provide the number of SGB-paid teachers who had had left their school permanently in this timeframe. Table 7.21 shows information principals provided as to where these teachers had gone, using the categories provided in the School Survey. The information has been ordered from the most commonly selected to the least commonly selected of the categories.

**Table 7.21: Category information from School Surveys as to where teachers who left schools between January 2007 and August 2008, have gone**

<b>WCED-paid teachers</b>	
<b>Number of teachers</b>	<b>Nr of reported cases</b>
Left to take up positions outside of the teaching profession	199
Retired permanently	170
Left to take a post at the same level at another WCED school in the same district	113
Left to take up a post at the same level at another WCED school in a different district	83
Emigrated or left to teach in another country	76
Left to take a promotion post at another WCED school	64
Death	50
Left teaching permanently due to ill health /medical incapacity	48
Moved to teach at a school in another province	46
Left to teach at a private school in the Western Cape	45
Left to take a promotion post in the education department (i.e. not at a school)	36
<b>SGB-paid teachers</b>	
<b>Number of teachers</b>	<b>Nr of reported cases</b>
Left to take up positions outside of the teaching profession	174
Left to take up a post at the same level at another WCED school in the same district	109
Left to take a post at the same level at another WCED school in a different district	93
Left due to lack of funding to pay them	75
Left to teach at a private school in the Western Cape	56
Emigrated or left to teach in another country	52
Retired permanently	36
Moved to teach at a school in another province	29
Left teaching permanently due to ill health/ medical incapacity	17
Death	16

Data from the School Surveys suggest that the highest proportion of WCED- and SGB-paid teachers who left the profession, left to take up positions outside of the teaching profession (attrition). The next highest proportion of WCED-paid teachers left because they were retiring (attrition). This group is followed by teachers (both SGB- and WCED-paid) who left either to take a post at the same level at another WCED school in the same or another district in the Western Cape<sup>35</sup> (turnover or mobility within the system).

Some principals noted that teachers who were on *contract* posts at their schools had left because they were offered *permanent* posts at other WCED schools. This indicates that lack of tenure plays a role in teachers' decisions to migrate to other schools, increasing teacher turnover. Table 6.1 in Chapter 6 shows that a total of 930 (20%) of the sample teachers (including privately-paid teachers) said they did not have permanent tenure and held temporary posts. This factor is important as teacher turnover has cost implications.

<sup>35</sup> In 86 cases principals did not know, or provided other information about where WCED-paid teachers who had left had gone. Principals reported that some female teachers had become full-time homemakers, stay-at-home mothers or were working part-time from home (for example, they have become 'entrepreneurs from home', begun playgroups, or give extra lessons or private remedial classes). Principals reported that an individual teacher had 'become a full-time cricket coach', been seconded to ABET Centres, moved to an FET college, started lecturing at a university, gone into the Western Cape Legislature, started studying full-time, or had 'absconded'.

The EQ asked teachers whether they intended remaining in the teaching profession. Table 7.22 reflects the sample of teachers' answers.

**Table 7.22: Teachers' responses regarding their intention to remain in the teaching profession**

Teachers' Response	Number	Percentage
Missing	119	3
Yes	2371	52
No	757	17
Don't know	649	14
Prefer not to answer	649	14
Total	4545	100

Table 7.22 shows that:

- 2 371 (52%) of the sample teachers stated that they intend remaining in the profession
- 2 055 (45%) either responded 'No' or said 'Don't know', or 'Prefer not to answer'
- 119 (3%) chose not to answer this question.

Whilst provincial data on attrition from the teaching profession (for example, to the private sector) is difficult to obtain, information in Table 7.23 below (from Yu, 2008) indicates that South Africa experiences a continuous net loss from the educational *and related fields*, of between 200 and 300 people (except in 2001, when the net loss is much greater).

**Table 7.23: Migrants from the educational or related fields (thousands of people)**

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Emigrants	127	133	115	79	69	106	90	189	179
Immigrants	314	351	320	272	314	357	666	410	438
Net gain/loss	-187	-218	-205	-193	-245	-251	-576	-221	-259

Data sources: Statistics South Africa website, UNESCO Institute for Statistics website and World Bank database website.

### ***Reasons for teacher attrition***

An open-ended item in the EQ asked teachers to provide reasons if they intended leaving the profession. A content analysis of responses rendered the following recurring themes ranked from the most commonly cited cluster of reasons to the least commonly cited.<sup>36</sup>

1. Poor remuneration (low salaries and lack of benefits) and lack of career progression and promotion opportunities (390).<sup>37</sup>

<sup>36</sup> Teachers often gave more than one reason.

<sup>37</sup> Researchers reported anecdotal evidence of un- or under-qualified or inappropriately qualified people being employed particularly in SGB posts, 'because they were the only people willing to accept the salary offered'.

2. High workload and stress (too much administrative work; having to work overtime, for example, supervising sport at weekends, or preparing for teaching especially, because of having to teach new or too many different learning areas/ subjects) (306).
3. Tough working conditions, lack of professional culture and poor human resource practices at *schools* (large classes; lack of resources and facilities; learners with great needs and poor achievement; not being professionally managed (for example, nepotism, lack of appreciation and consideration from school management, ineffectual school management, lacking leadership; etc.)) (224).
4. Lack of professional management and effective support from the *WCED* and *DoE* and loss of confidence in the system and curriculum (lack of recognition and not being treated as professionals; learners' rights being defended over teachers' rights; poor communication between the Department, schools and teaching staff; implementation of 'too many changes' to the system: 'too many learning areas in the curriculum'; and insufficient and irrelevant in-service training) (217).
5. Bad behaviour amongst learners (ill-disciplined learners; learners who lack motivation; learners who threaten teachers' safety) (196)
6. Not enjoying teaching and/or wanting to explore other professional options (128)
7. Retirement (27)
8. Early retirement or ill health (22)
9. Lack of tenure and the inability to secure a permanent post in the profession (10)

What needs to be established is where mobility across schools and where attrition from the teaching profession is greatest. For example, is migration from the profession more pronounced in more affluent or higher poverty schools (attrition rates), and are teachers in quintiles 1-4 schools more inclined to move to other schools (mobility rates) than in quintile 5 schools? This examination of contrasts is important, as a high staff turnover can impact on continuity and the impact of costly long-term school development plans put in place in higher poverty schools.

### **7.2.3 Recruitments and replacements**

In the School Survey, principals were asked to provide information on teaching positions filled at their school between January 2007 and August 2008.

School Survey data provided by *high school* principals on staff replacements/ recruitments for *Senior Phase and FET teaching positions* between January 2007 and August 2008 suggests that the highest proportion of posts *filled* at Senior Phase and FET level during the specified period were English posts, followed by Mathematics posts, and then by Afrikaans posts. The positions filled have been ranked below from the most frequent learning area/ subject post reported to the least frequent reported.

**Table 7.24: Principals' reports on posts filled at Senior Phase and FET level since January 2007 until August 2008**

Learning area/subject	Number reported
English	140
Mathematics	97
Afrikaans	87
Life Orientation	45
Mathematical Literacy	38
Accounting	32
Arts and Culture	31
Business Studies, Natural Sciences*, Physical Sciences*, Technology	25 each
Economic and Management Sciences, Life Sciences*	21 each
Social Sciences	20
isiXhosa, Computer Applications Technology, Geography	18 each
History	16
Music	13
Visual Arts	12
Consumer Studies	11
Information Technology	8
Tourism	4

\* Note: If the number reported for Natural Sciences, Physical Sciences and Life Sciences is combined, the total reported is 71.

Principals were also asked to identify the main sources of supply for replacement or new teaching positions.

### ***Primary Schools***

Data provided by primary school principals on staff replacements/recruitments at Foundation Phase and Grade 4-7 suggest that:

- the major source of supply for Foundation Phase and Intermediate Phase is teachers from *other WCED schools*
- *newly qualified* teachers are a secondary but smaller source of supply
- few primary school teaching positions are reportedly filled by teachers from *other provinces*, or by teachers working *outside the profession*, or by teachers from *private schools*, or by *foreign or immigrant* teachers from other African countries or countries outside of Africa.

### ***High schools***

Data provided by high school principals on staff replacements/recruitments overall suggest that:

- the major source of supply for Grades 8-12 is teachers from *other WCED schools*
- *newly qualified* teachers are the second main source of supply (less than half of the main source), followed by teachers from *outside of the profession*, and then by teachers from *other provinces*

- few teaching positions are reportedly filled by teachers from *private schools*, or by *foreign or immigrant* teachers from other African countries or from countries outside of Africa.

There are, however, some differences in the figures for different areas and subjects. For example, available data suggest that the main source for Information Technology and the second main source for Natural Sciences are people working outside of the teaching profession. Other possible differences that need to be explored further are evident in the figures on Table 7.25.

**Table 7.25: Principals' reports on sources of high school teacher supply by learning area/subject**

	Other WCED schools	Schools in other provinces	Private schools	Newly qualified	Other African countries	Other countries outside Africa	Outside the teaching profession
Afrikaans	40	8	1	21	0	0	17
English	69	16	4	31	2	2	16
isiXhosa	7	3	0	7	0	0	1
Accounting	15	6	1	8	2	0	0
Arts and Culture	12	3	2	5	0	1	8
Business Studies	13	2	1	6	0	0	3
Computer Application Technology	8	4	1	3	0	0	2
Consumer Studies	5	0	0	4	0	0	2
Economic and Management Sciences	9	5	0	3	0	1	3
Geography	9	3	0	1	1	0	4
History	7	2	0	2	0	1	4
Information Technology	2	1	0	1	0	0	4
Life Orientation	17	7	0	10	1	1	9
Life Sciences	12	1	1	5	0	1	1
Mathematics	44	7	4	25	4	4	9
Mathematical Literacy	19	7	0	7	3	2	0
Music	2	1	2	3	0	0	5
Natural Sciences	9	1	0	3	2	4	6
Physical Sciences	9	4	1	7	0	0	4
Social Sciences	9	3	0	4	1	1	2
Technology	14	1	2	4	0	1	3
Tourism	2	0	0	2	0	0	0
Visual Arts	8	0	0	3	0	0	1
<b>Total</b>	341	85	20	165	16	19	103

Data in Table 7.25 suggest that:

- the highest proportion of staff turnover *between WCED schools* is amongst English teachers, followed by Mathematics and then by Afrikaans teachers.
- the highest proportion of *newly qualified* teachers being employed is also English teachers, followed by Mathematics, and then Afrikaans.

There is also some evidence of experienced teachers dropping back into the system after resigning. In the School Survey some school principals noted that teachers had resigned just so that they could access their pension funds and had subsequently returned to teaching. (This phenomenon is significant as it could make education planning difficult because it confounds statistics on teacher attrition, turnover/mobility, and new appointments).

### ***Conclusions***

Available information suggests that:

- Primary and high schools are largely using the existing WCED stock to replace teachers who leave or to fill new positions.
- Teachers are leaving one school for another, and that, in high schools, mobility amongst teachers is higher amongst Mathematics and English and Afrikaans teachers. Such mobility may be contributing to inequity in the distribution of teachers in these subjects. In Chapter 6, we identified a greater proportion of teachers with first general degrees (and with first degrees and secondary qualifications) teaching FET classes in quintile 5 schools than in schools in quintiles 1-4 (combined). This profile suggests inequity between higher-poverty and more affluent schools in the distribution of more highly specialised teachers at the FET level. Both these sets of findings seem to indicate that the individual choice of more highly specialised teachers in these subjects is not to teach in higher-poverty schools. What also needs to be investigated is whether and to what extent members of this group of teachers are moving from higher poverty schools to historically more affluent schools.
- There needs to be further investigation of the extent to which teachers who are considered to be seriously incompetent or inefficient are being exchanged between schools rather than replaced by more effective teachers.

#### **7.2.4 Shortages and difficult to fill posts by learning area and subject**

##### ***Primary schools***

As an indicator of shortages in the *Intermediate Phase*, primary school principals were asked (in the School Survey) to estimate by how many qualified teachers their school was short, in 2008, for Grade 7 *learning area specialisations*. Listed below are the learning areas ranked by the

highest number of reported shortages in a learning area to the lowest number of reported shortages.

1. Arts and Culture
2. Technology
3. Economic and Management Sciences
4. Mathematics
5. Natural Sciences
6. English (1<sup>st</sup> and 2<sup>nd</sup> language)
7. Life Orientation
8. Social Sciences
9. Afrikaans (1<sup>st</sup> and 2<sup>nd</sup> language)
10. isiXhosa (1<sup>st</sup> and 2<sup>nd</sup> language).

Reported shortage in the Intermediate Phase are predominantly in the newer more integrated learning areas such as Arts and Culture, Technology and Economic and Management Sciences, and then in core areas of Mathematics and Science.

### ***High Schools***

In the School Survey, high school principals were asked how many *teachers currently teaching* various learning areas/subjects are, in their estimation, *inadequately qualified* to teach the learning area/subjects at the appropriate school level. These counts have been ranked below from the highest to the lowest total reported for each learning area/subject.

**Table 7.26: Principals' reports on the number of inadequately qualified teachers\***

<b>Learning area/subject</b>	<b>Number reported</b>
Mathematics	38
Life Orientation	31
English	27
Mathematical Literacy	26
Arts and Culture	20
Afrikaans, Tourism	18
Technology	15
Physical Sciences	10
Computer Application Technology	9
Accounting, EMS, Life Sciences	8
Social Sciences	6
Business Studies, Natural Sciences	5
Consumer Studies, Visual Arts	3
Geography, History	2
isiXhosa, IT, Music	1

\* Principals reported inadequacies in more than one learning area/subject

The School Survey also asked high school principals to estimate how many *additional qualified teachers* they believed their school still *needed* in 2008 for the different learning areas or subject specialisations (in addition to the teachers who are already teaching at the school). These have been ranked below from the most common learning area/subject additional post to the least common additional post needed.

**Table 7.27: Additional qualified teachers that principals said their school still needed in 2008**

Learning area/subject	Number reported
Mathematics	57
English	56
Mathematical Literacy	48
Afrikaans	37
Life Orientation	29
Physical Sciences	25
Arts and Culture	22
Accounting	17
Business Studies	16
Geography	15
Technology	14
History	12
CAT, EMS	11
Life Sciences, Natural Sciences, Social Sciences	10 each
Consumer Studies	9
Tourism	8
isiXhosa, Music, Visual Arts	4 each
Information Technology	2

According to data provided by the high school principals who completed the School Surveys, the highest proportions of cases where *additional* qualified high school teachers are needed are in the core subjects of Mathematics and English, followed by Mathematical Literacy, and then Afrikaans. However, if one combines the number reported for Physical Sciences, Natural Sciences and Life Sciences, the proportion is 45, making the Sciences the fourth highest number needed.

Principals were also asked to provide the number of high school teaching positions, between January 2007 and August 2008, where *no qualified candidate could be found* so a temporary or part-time appointment had to be made, or, where classes were without a teacher for longer than three months. Numbers reported have been ranked below from the most common learning area/subject position unfilled to the least common reported.<sup>38</sup>

<sup>38</sup> If the position was for more than one learning area/subject, principals were asked to enter the position under the more significant or main learning area/ subject.

**Table 7.28: Principals' reports on high school teaching positions, between January 2007 and August 2008, where no appropriately qualified candidate could be found**

Learning area/subject	Number reported
Mathematics	14
English	12
Afrikaans	8
Accounting, Mathematical Literacy, Physical Sciences, Social Sciences	6 each
Life Orientation, Technology	5
Arts and Culture	4
Business Studies, CAT, Consumer Studies, EMS, History, Life Sciences, Natural Sciences	3 each
Geography, Visual Art	2

Data suggest that the highest proportion of cases of unfilled posts in the specified period is in Mathematics posts, followed by English, and then Afrikaans posts. However, if one combines the numbers reported for Physical Sciences, Life Sciences and Natural Sciences, the count is 12, making the Sciences the second highest proportion with English.

A concern was that other 'real' needs and preferences of learners and schools might be hidden if the School Survey only asked for information about the curriculum already offered at schools. Thus the Survey also asked principals which FET subjects currently not on offer at their school, they would like to offer. Table 7.29 provides subjects cited *by three or more school principals* ranked in order from most to least often of the subjects cited.

**Table 7.29: FET subjects currently not offered at schools that principals most often said they would like to offer**

FET Subject	No. of schools
Tourism	25
Hospitality Studies	20
Computer Applications Technology	15
isiXhosa, Information Technology	11
Music	7
Dance Studies, Engineering Graphics and Design	6
Consumer Studies	5
Agricultural Sciences, Dramatic Arts	4
Electrical Technology, Geography	3

Indications are that the subjects that principals most often said they would like to offer are Tourism (25), followed by Hospitality Studies (20), and then Computer Applications Technology (15), all are more work-related subjects.

Finally, the School Survey also included an open-ended question asking about teacher supply and demand issues and associated challenges. Four main concerns were identified via a content analysis of the responses. These analyses are ordered below from the most to the least commonly cited.

1. Current *staff establishments* and the *need for additional posts*:

- Existing stock of staff who are not always suitably qualified or specialised for teaching new curriculum learning areas or subjects; and limitations in the choice of subjects schools are able to offer.
- The need for remedial/ELSEN teachers and assistant teachers for example, to accommodate ELSEN learners, and learners with insufficient levels of proficiency in the language of learning and teaching (LOLT).
- Problems experiences in coping with the high administrative load, insufficient administrative support, and bureaucratic demands made on schools and teachers.
- The need, especially in schools serving poor communities, to offer extra mural activities to keep children away from crime and drugs.
- Class size and learner:teacher ratio of 35/40:1 – difficulties arising, such as: the need for parallel medium classes; FET subject choices available to learners; behavioural problems amongst learners; inclusive education; classes with children with different home languages (some principals advocated decreasing the ratio to 30:1).
- School principals are being counted as part of the teaching establishment when it is impossible for principals to do justice to administrative and management duties and teach.
- Schools are being told what their staff establishment is too late in the year to plan for the next year; and errors, on the part of the WCED, ‘which are not rectified’ regarding school staff establishment.

2. The *recruitment and replacement system* and difficulty in *attracting high quality temporary, permanent, and part-time and new replacement staff*:

i) **Recruitment costs**

- The high cost of advertising WCED temporary, part-time and contract positions, has to be carried by schools.
- Applicants from other regions who apply for posts but are unavailable for interviews because they have to cover travel and other costs themselves.
- Schools having to constantly fundraise to cover SGB salaries, and then are only able to offer poor salaries which often do not attract the most effective teachers.

ii) **Replacement timeframes and practices, and placement and appointment processes and systems that slow down employment processes**

- The WCED vacancy list comes out only twice a year.
- WCED ‘taking too long to finalise appointments’ (i.e. confer permanent appointments) and insecurity of tenure of effective teachers through lengthy provisional appointments leads to loss of better candidates.
- WCED is ‘taking months or years to finalise teachers’ early retirement on grounds of health or stress, whilst in meanwhile, the teacher in question is absent’.
- And again, schools are being told what their staff establishment is too late in the year to plan for the next year; errors, on the part of the WCED, ‘which are not rectified’ regarding school staff establishment also plays a role here.

iii) **Lack of spare capacity**

- There are too few suitable applicants for posts, especially males. Applicants are often older teachers, including pensioners, who are not trained for new curriculum needs. Difficulty in attracting good quality teachers from different population groups (either because teachers prefer to teach in schools that are similar to the ones with which they are familiar, or where they share a similar background to other teachers or to the majority of learners); the latter factor was mentioned as an obstacle to Employment Equity.
  - There is a lack of appropriately and well-qualified and experienced people to fill temporary posts.
3. The need to *improve the image of the teaching profession* and address issues that make teaching unattractive to *new entrants* and that cause teacher migration from the profession to the private sector or overseas as contract teachers. In particular, there is a need to attract the best people into the profession and motivate the current stock of more effective teachers to remain in the profession:
- Provide incentives such as salaries and packages that include perks such as long leave.
  - Providing support such as more effective professional development, study leave and other opportunities for teachers to improve their qualifications.
  - Improve working and other conditions in schools.
4. Lack of *infra-structural and resource provisioning* such as additional classrooms, laboratories, computers, and other facilities and equipment for teaching (for example, new-work related subjects), repairs to existing facilities, and adequate security (for example, burglar bars and guards). Improved infra-structure and resources are especially needed in schools serving very poor communities and in areas where crime is high and parents are unemployed.

Chapter 8 looks at data on sources of teacher supply.

## CHAPTER 8: SOURCES OF TEACHER SUPPLY

The focus of this study is on matching the supply of teachers with the curriculum needs of schools. In order to establish the future supply of teachers, this chapter focuses on ‘new’ graduate teachers entering the workforce rather than on teachers who are already qualified and enrolled for upgrading or CPTD qualifications. The chapter also examines other potential sources of teacher supply, such as unemployed people from the education, training and development field.

### 8.1 Student teacher graduates

This section reports on the numbers and profiles of education students graduating from the four Western Cape universities with 4-year B Ed or PGCEs<sup>39</sup> in 2006, 2007 and 2008, and their phase level and learning area/subject specialisations.<sup>40</sup> This information on IPET graduates/final year students was supplied by the four institutions. As outlined in Chapter 4, Section 4.3.2.1, HEIs were asked to provide information for the years 2006, 2007 and 2008 on graduating students (excluding their names) by: gender, age, home language<sup>41</sup>; phase and subject specialisations/ method courses, and the language/s of instruction offered.

Information provided by the four institutions differed slightly in terms of the type and format of the details. Thus information from each institution is presented separately in line with the way in which the data was *received from each of the institutions*.

Table 8.1 provides a simple count of graduates/final year students at each of the HEIs for each year.

---

<sup>39</sup> The PGCE (Post-graduate Certificates in Education) follows an appropriate first degree (for example, BA/BSc). It is to be replaced in the HEQF by an Advanced Diploma in Education (ADE). Both the four-year B Ed and the PGCE are recognised at REQV 14 level. They are the main IPET/initial professional education of teachers’ qualifications.

<sup>40</sup> It should be noted that the supply data provided in this section exclude contributions from UNISA.

<sup>41</sup> The focus was on graduate students’ home language, especially on the count of isiXhosa-speaking students particularly for the Foundation Phase. Data on race was not specifically requested and obtained from all four HEIs.

**Table 8.1: IPET graduates/final year students 2006-2008: US, UWC, CPUT, UCT**

<b>Graduate students</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>University of Stellenbosch</b>			
B Ed (GET – Foundation Phase)	65	58	65
B Ed (GET – Intermediate and Senior Phase)	37	31	30
B Sc (Ed)	12	6	5
B Ed (Psych)	26	36	18
PGCE (Secondary teaching)	79	189	107
<b>University of Western Cape</b>			
B Educ (Arts) IV*	11	20	
B Ed IV (GET – Senior Phase)**			44
PGCE (Secondary teaching)***	52	45	47
<b>Cape Peninsula University of Technology</b>			
B Ed (GET – Foundation Phase)	143	128	159
B Ed (GET – Intermediate/Senior Phase)	122	129	148
B Ed (FET):Economic & Management Science	36	39	43
B Ed Specialisation	143	89	95
PGCE(GET – Foundation Phase)	10	5	2
PGCE (GET – Intermediate and Senior Phase)	25	23	18
PGCE (FET)	33	21	38
<b>University of Cape Town</b>			
PGCE (GET – Intermediate and Senior Phase)	28	36	24
PGCE (FET – Secondary teaching)	40	36	47
B Mus (Education)		4	5

\* UWC used to offer a B Educ based in the Arts Faculty for 3 years with the fourth year in Education. The qualification is not linked to any particular phase. The B Educ (Arts IV) is being phased out as it has been replaced by the B Ed IV (GET – Senior Phase).

\*\* The first cohort of UWC B Ed IV (GET – Senior Phase) students enrolled in 2005 with the fourth and final year in 2008. As noted previously, although UWC had only 44 final year B Ed IV (Senior Phase) students in 2008, UWC was not able to separate the details of 88 students from Northern Institute for Higher Education (NIHE) in the Northern Cape from the details of UWC students for the analysis of individual student level data in Tables 8.15-8.18 and 8.21-22.

\*\*\* The 2008 counts of UWC final year students are provisional because students wrote special examinations in January 2009 and promotions of PGCE and B Ed students were only finalised in February 2009. The graduation ceremony takes place in March.

Data in Table 8.1 indicate the total IPET graduate output for the period 2006-2008:

- University of Stellenbosch (US): 764
- University of the Western Cape (UWC): 219
- Cape Peninsula University of Technology (CPUT): 1 449
- University of Cape Town (UCT): 220.

Instead of a simple count of student graduates each year, the tables that follow show the counts for each institution of students' specialisation subjects by year (2006-2008) or for 2006-2008 combined. As explained in Chapter 4, Section 4.3.2.1, most students offer two or more subjects or learning areas (Methods). Tables 8.23 (UWC) and 8.35 (UCT) are two-way tables providing counts of students'

Method 1 and Method 2 subjects. Some of the tables that follow, such as Tables 8.3 and 8.6, show students' home language/s (usually partitioned for each of the three main teaching languages in the Western Cape) and subject specialisation. Other tables provide information about students' age and/or gender, and/or home language.

### University of Stellenbosch

Tables 8.2-8.15 provide data for the University of Stellenbosch (US).

**Table 8.2: University of Stellenbosch: B Ed (GET – Foundation Phase) graduates (2006-2008) by subject specialisation**

US 2006 to 2008 Year	Afrikaans 4 <sup>42</sup> (Found. Phase)	English 4 (Found. Phase)	Maths. 4 (Found. Phase)	Comm. isiXhosa 4
2006	65	65	65	0
2007	58	58	58	58
2008	65	65	65	65
<b>Total</b>	<b>188</b>	<b>188</b>	<b>188</b>	<b>123</b>

**Table 8.3: University of Stellenbosch: B Ed (GET – Foundation Phase) (2006-2008 combined) graduates' home language by subject specialisations**

US 2006 to 2008 Home Language	Afrikaans 4 (Found. Phase)	English 4 (Found. Phase)	Maths. 4 (Found. Phase)	Comm. isiXhosa 4
Afrikaans	154	154	154	101
English	34	34	34	22
<b>Total</b>	<b>188</b>	<b>188</b>	<b>188</b>	<b>123</b>

<sup>42</sup> This number denotes the course level, in this case 4 years of Afrikaans.

**Table 8.4: University of Stellenbosch: B Ed (GET – Foundation Phase) graduates (2006-2008 combined): age by gender**

US 2006 to 2008 Age	Gender		Total
	Female	Male	
20	1		1
21	13		13
22	96		96
23	57		57
24	13		13
25	5		5
26	1		1
27	1		1
29	1		1
<b>Total</b>	<b>188</b>	<b>0</b>	<b>188</b>

**Table 8.5: University of Stellenbosch: B Ed (GET – Intermediate and Senior Phase) and B Sc (Ed) graduates (2006-2008) by learning area/subject specialisations**

US Year	Mathematics 4	Science and Technology. 4	Natural Sciences 4	English 4	Social Sciences 4	Afrikaans 4	Comm. isiXhosa 4	Mathematics 3 <sup>43</sup>	Chemistry 3	Physics 3	EMS
2006	29	15	0	12	17	11	0	4	6	2	0
2007	22	0	12	9	13	10	28	4	2	0	0
2008	26	0	8	11	9	2	30	2	2	1	8
<b>Total</b>	<b>77</b>	<b>15</b>	<b>20</b>	<b>32</b>	<b>39</b>	<b>23</b>	<b>58</b>	<b>10</b>	<b>10</b>	<b>3</b>	<b>8</b>

**Table 8.6: University of Stellenbosch: B Ed (GET – Intermediate and Senior Phase) and B Sc (Ed) graduates (2006-2008 combined): home language by specialisation**

US 2006 to 2008 Home Language	Mathematics 4	Science and Technology. 4	Natural Sciences 4	English 4	Social Sciences 4	Afrikaans 4	Comm. isiXhosa 4	Mathematics 3	Chemistry 3	Physics 3	EMS
Afrikaans	56	10	16	16	30	23	46	8	10	3	6
English	17	4	3	13	8	0	9	2	0	0	1
German	4	1	1	2	1	0	2	0	0	0	0
African Language	0	0	0	1	0	0	1	0	0	0	1
<b>Total</b>	<b>77</b>	<b>15</b>	<b>20</b>	<b>32</b>	<b>39</b>	<b>23</b>	<b>58</b>	<b>10</b>	<b>10</b>	<b>3</b>	<b>8</b>

<sup>43</sup> This number denotes 3 years of Mathematics.

**Table 8.7: University of Stellenbosch: B Ed (GET – Intermediate and Senior Phase) graduates (2006-2008 combined): age by gender**

US 2006 to 2008 Age	Gender		Total
	Female	Male	
21	4		4
22	55	3	58
23	20	1	21
24	10	1	11
25	3	1	4
<b>Total</b>	<b>92</b>	<b>6</b>	<b>98</b>

**Table 8.8: University of Stellenbosch: B Sc (Ed) graduates (2006-2008 combined): age by gender**

US 2006 to 2008 Age	Gender		Total
	Female	Male	
21		1	1
22	9	2	11
23	2	5	7
24	1	1	2
25	2		2
<b>Total</b>	<b>14</b>	<b>9</b>	<b>23</b>

**Table 8.9: University of Stellenbosch: B Ed (Psych) (2006-2008) graduates by learning area/ subject specialisations**

US Year	Curriculum Studies									
	Educ. Psych 4	Life Orient. (Psych.)	English	Afrikaans	History	isiXhosa	Mathematics	Natural Sciences	School Guidance	Biology
2006	26	0	22	1	1	1	0	0	26	1
2007	36	36	29	5	1	2	1	0	0	0
2008	18	18	15	1	1	0	0	1	0	0
<b>Total</b>	<b>80</b>	<b>54</b>	<b>66</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>26</b>	<b>1</b>

**Table 8.10: University of Stellenbosch: B Ed (Psych) (2006-2008) graduates home language by learning area/subject specialisations**

US Home Language	Curriculum Studies									
	Educ. Psych 4	Life Orient. (Psych.)	English	Afrikaans	History	isiXhosa	Mathematics	Natural Sciences	School Guidance	Biology
Afrikaans	64	43	51	7	2	3	1	1	21	1
English	16	11	15	0	1	0	0	0	5	0
<b>Total</b>	<b>80</b>	<b>54</b>	<b>66</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>26</b>	<b>1</b>

**Table 8.11: University of Stellenbosch: B Ed (Psych) graduates (2006-2008 combined): age by gender**

US 2006 to 2008 Age	Gender		Total
	Female	Male	
20	1		1
21	5		5
22	43	2	45
23	20		20
24	6		6
25	1		1
33	1		1
<b>Total</b>	<b>78</b>	<b>2</b>	<b>80</b>

**Table 8.12: University of Stellenbosch: PGCE (FET)\* (2006-2008) graduates by learning area/subject specialisations**

US Year	Curriculum Studies																			
	Life Sciences	Maths Literacy	Mathematics	Geography.	Life Orient. (Psych.)	Afrikaans	English	German	History	Life Orientation – Movement Studies	Economics	Natural Sciences	Speech and Drama	Accountancy	Physical Sciences	Business Management	Art	isiXhosa	Information. Technology	Religion Studies
2006	13	18	7	11	37	13	28	2	4	14	8	20	5	11	0	6	0	3	1	2
2007	13	14	0	4	40	16	31	2	13	11	7	14	4	7	0	6	1	5	0	1
2008	23	28	2	8	35	12	38	1	15	20	4	16	15	14	4	2	1	2	1	2
<b>Total</b>	<b>49</b>	<b>60</b>	<b>9</b>	<b>23</b>	<b>112</b>	<b>41</b>	<b>97</b>	<b>5</b>	<b>32</b>	<b>45</b>	<b>19</b>	<b>50</b>	<b>24</b>	<b>32</b>	<b>4</b>	<b>14</b>	<b>2</b>	<b>10</b>	<b>2</b>	<b>5</b>

\* Secondary teaching

**Table 8.13: University of Stellenbosch: PGCE (FET)\* (2006-2008 combined) graduates home language by learning area/subject specialisations**

US Home Language	Curriculum Studies																			
	Life Sciences	Maths Literacy	Mathematics	Geography	Life Orientation – Psychology	Afrikaans	English	German	History	Life Orientation. – Movement Studies	Economics	Natural Sciences	Speech and Drama	Account	Physical Sciences	Business Management	Art	isiXhosa	Information Technology	Religion Studies
Afrikaans	36	44	7	16	86	40	72	5	21	28	14	40	21	26	2	11	2	9	1	2
English	12	15	2	7	24	1	24	0	10	16	5	9	2	6	2	3	0	1	1	2
German	1	1	0	0	1	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0
isiXhosa	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>49</b>	<b>60</b>	<b>9</b>	<b>23</b>	<b>112</b>	<b>41</b>	<b>97</b>	<b>5</b>	<b>32</b>	<b>45</b>	<b>19</b>	<b>50</b>	<b>24</b>	<b>32</b>	<b>4</b>	<b>14</b>	<b>2</b>	<b>10</b>	<b>2</b>	<b>5</b>

\* Secondary teaching

**Table 8.14: University of Stellenbosch: PGCE (Secondary teaching) graduates (2006-2008 combined): age by gender**

US 2006 to 2008 Age	Gender		Total
	Female	Male	
21	2		2
22	40	6	46
23	94	14	108
24	84	20	104
25	45	11	56
26	10	4	14
27	7	11	18
28	2	6	8
29	1		1
30	3	1	4
31		2	2
32	2	1	3
35	3		3
37		1	1
41		1	1
43		1	1
44		1	1
45	2		2
<b>Total</b>	<b>295</b>	<b>80</b>	<b>375</b>

**Table 8.15: University of Stellenbosch: All education graduates (2006-2008 combined): age by gender**

US 2006 to 2008 Age	Gender		Total
	Female	Male	
20	2		2
21	24	1	25
22	243	13	256
23	193	20	213
24	114	22	136
25	56	12	68
26	12	4	16
27	8	11	19
28	2	6	8
29	2		2
30	3	1	4
31		2	2
32	2	1	3
33	1		1
35	3		3
37		1	1
41		1	1
43		1	1
44		1	1
45	2		2
<b>Total</b>	<b>667</b>	<b>97</b>	<b>764</b>

### University of the Western Cape

Table 8.16-8.21 provide data for the University of the Western Cape (UWC).

**Table 8.16: University of Western Cape: Education graduates (2006-2008): qualification by method subjects**

UWC Qualification	Accounting	African Lang	Afrikaans	Biology	Business Economics	Economics	EMS	English	General Science	Gen Science (Biology)	Gen Science (Physical Science)	Geography	History	Mathematics	Needle Work	Physical Science	Physical Education	Life Orientation	Social Science	Total
2006 B Educ (Arts) IV	0	3	1	1	0	0	1	5	1	0	0	0	5	0	0	0	0	4	0	
2006 PGCE (FET)*	1	3	14	4	2	3	0	24	2	0	0	3	18	1	0	0	0	12	0	
2007 B Educ (Arts) IV	0	0	8	0	0	0	0	17	0	0	0	1	1	0	0	0	0	12	1	
2007 PGCE (FET)*	0	2	2	6	0	0	0	13	8	0	1	8	5	0	0	1	0	21	10	
2008 B Ed IV (Senior Phase) <sup>44</sup>	0	7	11	1	0	1	27	43	18	0	0	1	3	24	5	4	7	19	17	
2008 PGCE (FET)*	0	3	3	9	0	2	0	17	9	3	1	2	16	2	0	0	0	13	0	
<b>Total</b>	<b>1</b>	<b>18</b>	<b>39</b>	<b>21</b>	<b>2</b>	<b>6</b>	<b>28</b>	<b>119</b>	<b>38</b>	<b>3</b>	<b>2</b>	<b>15</b>	<b>48</b>	<b>27</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>81</b>	<b>28</b>	<b>493</b>

\* Secondary teaching

<sup>44</sup> UWC had 44 final year B Ed IV (Senior Phase) students in 2008. However, UWC acts as an accrediting institution for the Northern Institute for Higher Education (NIHE) in the Northern Cape, and was not able to separate the details of individual NIHE students from the details of UWC students for the ESDA purposes. Hence the counts of 2008 UWC B Ed students include 88 students from the Northern Institute in the Northern Cape (i.e. n=128).

**Table 8.17: University of the Western Cape: All education graduates (2006-2008 combined): age by gender\***

UWC 2006 to 2008 Age	Gender		Total
	Female	Male	
21	10	2	12
22	23	6	29
23	22	10	32
24	20	13	33
25	15	13	28
26	11	7	18
27	11	6	17
28	9	4	13
29	8	6	14
30	3	1	4
31	8	2	10
32	4	10	14
33	5		5
34	5	4	9
35	2	1	3
36	9	5	14
37	4	3	7
38	2	1	3
39	6	2	8
40	6	3	9
41	4	1	5
42	2	2	4
44	1	1	2
45		1	1
46		1	1
47	1		1
48	1		1
49	3		3
51		1	1
52	1		1
53	1		1
<b>Total</b>	197	106	303

\* The counts include 88 B Ed IV (Senior Phase) 2008 students from the Northern Institute for Higher Education in the Northern Cape.

**Table 8.18: University of the Western Cape: All education graduates (2006-2008 combined): home language by gender\***

UWC 2006 to 2008 Home Language	Gender		Total
	Female	Male	
Afrikaans	65	45	110
English	51	20	71
English and Afrikaans	29	7	36
Other		2	2
South Sotho	2	1	3
Setswana	15	10	25
Tshivenda	2	1	3
isiXhosa	32	18	50
isiZulu	1	2	3
<b>Total</b>	<b>197</b>	<b>106</b>	<b>303</b>

\* The counts include 88 B Ed IV (Senior Phase) 2008 students from the Northern Institute for Higher Education in the Northern Cape.

**Table 8.19: University of the Western Cape: B Educ (Arts) IV graduates (2006-2007 combined): age by gender**

UWC 2006 to 2007 Age	Gender		Total
	Female	Male	
22	2	1	3
23	3		3
24	3		3
25	2	1	3
26	4		4
27	2		2
28	3		3
29	1		1
31	1		1
34	1		1
36	1		1
38	1		1
39	1		1
40	1		1
41	1		1
42	1		1
49	1		1
<b>Total</b>	<b>29</b>	<b>2</b>	<b>31</b>

**Table 8.20: University of the Western Cape: B Educ (Arts) IV graduates (2006-2007 combined): home language by gender**

UWC 2006 to 2007 Home Language	Gender		Total
	Female	Male	
Afrikaans	8	1	9
English	9	1	10
English and Afrikaans	8		8
Setswana	3		3
isiXhosa	1		1
<b>Total</b>	<b>29</b>	<b>2</b>	<b>31</b>

**Table 8.21: University of the Western Cape: B Ed IV (GET – Senior Phase) graduates (2008): age by gender**

UWC 2006 to 2008 Age	Gender		Total
	Female	Male	
21	6	2	8
22	18	5	23
23	10	8	18
24	8	5	13
25	5	2	7
26	4	6	10
27	8	4	12
28	5	2	7
29	4	2	6
30	1	1	2
31	3	1	4
32	2	3	5
33	2		2
34	2		2
35	1		1
37	3	1	4
38	1	1	2
41	1		1
42		1	1
<b>Total</b>	<b>84</b>	<b>44</b>	<b>128</b>

**Table 8.22: University of the Western Cape: B Ed IV (GET – Senior Phase) graduates (2008): home language by gender**

UWC 2006 to 2008 Home Language	Gender		Total
	Female	Male	
Afrikaans	39	23	62
English	20	5	25
English and Afrikaans	7	3	10
South Sotho	1	1	2
Setswana	11	10	21
Tshivenda		1	1
isiXhosa	5	1	6
isiZulu	1		1
<b>Total</b>	<b>84</b>	<b>44</b>	<b>128</b>

In Table 8.23 the **Row Total** provides the count of students for each Method 1 listed, and the **Column Total** provides the count for each Method 2 listed. The significant column is the **Row + Column Total** which provides the total count for each Method (learning area or subject).

**Table 8.23: University of the Western Cape: PGCE (FET)\* graduates (2006-2008 combined): specified method subjects**

Method 1	Method 2														Row + Column Total						
	UWC 2006 to 2008	Accounting	Afrikaans	Biology	Business Economics	EMS	English	Gen Science	Gen Science (Biology)	Gen Science (Phys Sc)	Geography	History	Mathematics	School Guidance		Social Sciences	No second method	Physical Science	African Lang	Row Total	
Method 1																				<b>Combined</b>	
African Language																				303 Students	
Afrikaans						15				1	3	1	7	1						09 with 0 methods	
Arabic						1														36 with 1 method	
Biology			1				1	2	1	1	1	3	2				1			217 with 2 methods	
Economics	1				2															41 with 3 methods	
EMS		2													2	3				612 pairs of methods	
English							3		1					36	11	2					
General Science				7				2	1	1		2	1								
Geography			1	1			4	2					5								
History			1	1									11								
Mathematics									16							4					
Needlework											1		3								
Physical Education									1		2		4								
School Guidance													1			1		7	9	88	
Social Sciences																2			3	17	
No second method																				21	
Physical Science			1										3							4	5
Life Orientation			7	1		18	12	17			3	4	7		8		7			84	84
Accounting																					1
Business Economics																					2
Gen Sc (Biology)																					3
Gen Sc (Physical Sc)																					2
<b>Column Total</b>	<b>1</b>	<b>11</b>	<b>12</b>	<b>2</b>	<b>18</b>	<b>37</b>	<b>40</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>29</b>	<b>11</b>	<b>79</b>	<b>14</b>	<b>21</b>	<b>1</b>	<b>23</b>	<b>306</b>	<b>612</b>		

**Table 8.24: University of the Western Cape: PGCE (Secondary teaching) graduates (2006-2008 combined): age by gender**

UWC 2006 to 2008 Age	Gender		Total
	Female	Male	
21	4		4
22	3		3
23	9	2	11
24	9	8	17
25	8	10	18
26	3	1	4
27	1	2	3
28	1	2	3
29	3	4	7
30	2		2
31	4	1	5
32	2	7	9
33	3		3
34	2	4	6
35	1	1	2
36	8	5	13
37	1	2	3
39	5	2	7
40	5	3	8
41	2	1	3
42	1	1	2
44	1	1	2
45		1	1
46		1	1
47	1		1
48	1		1
49	2		2
51		1	1
52	1		1
53	1		1
<b>Total</b>	<b>84</b>	<b>60</b>	<b>144</b>

**Table 8.25: University of the Western Cape: PGCE (Secondary teaching) graduates (2006-2008 combined): home language by gender**

UWC 2006 to 2008 Home Language	Gender		Total
	Female	Male	
Afrikaans	18	21	39
English	22	14	36
English and Afrikaans	14	4	18
Other		2	2
South Sotho	1		1
Setswana	1		1
Tshivenda	2		2
isiXhosa	26	17	43
isiZulu		2	2
<b>Total</b>	<b>84</b>	<b>60</b>	<b>144</b>

**Cape Peninsula University of Technology**

Table 8.26-8.33 provide data for the Cape Peninsula University of Technology (CPUT).

**Table 8.26: Cape Peninsula University of Technology: Foundation Phase B Ed graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation**

Year	CPUT	Qualification Names	Count	Average Age	Gender		Home language				Teaching language			Specialisation										
					% Female	% Male	% Afrikaans	% Afrikaans/English	% English	% isiXhosa	% Other	% English	% Afrikaans	% isiXhosa	EARLY CHILDHOOD 4 (SPECIALISATION)	EARLY CHILDHOOD DEVELOPMENT 3	ENVIRONMENTAL STUDIES 3 <sup>45</sup>	LANG: AFRIKAANS 3	LANG : ENGLISH 3	LANG : ISIXHOSA 3	MATHEMATICS 3	MATHEMATICS 4 (SPECIALISATION)	SPECIFIC SUBJ. DIDACTICS: INTEGRATED ARTS 4	
2006		B Ed: (GET – Foundation Phase)	143	25	100	0	73	0	26	1	0	37	74	1	0	11	30	11	10	1	61	0	32	
2007		B ED: (GET – Foundation Phase)	128	25	99	1	66	2	32	1	0	43	70	2	1	15	26	6	5	2	53	1	27	
2008		B ED: (GET – Foundation Phase)	159	23	100	0	50	0	48	1	1	55	52	1	0	26	35	4	9	2	58	0	26	
All years		Students	430												1	52	91	21	24	5	172	1	85	
All years		Specialisations	452																					

<sup>45</sup> The Arabic numeral 3 indicates that students have three years of Mathematics. In the first year the subject is offered as an introduction to the subject (for example, Introduction to Mathematics as opposed to Mathematics 1).

**Table 8.27: Cape Peninsula University of Technology: Intermediate/Senior Phase B Ed graduates (2006–2008): qualifications by gender, home language, teaching language and specialisation**

YEAR	CPUT	Qualification Name		Count	Average Age	Gender		Home language				Teaching language			Specific Subject Didactics or Subject Didactics																	
		% Female	% Male			% Afrikaans	% Afrikaans/English	% English	% isiXhosa	% Other	% English	% Afrikaans	% isiXhosa	LEARNING AREAS 1 (Nat Sci) <sup>46</sup>	LEARNING AREAS 2 (Maths)	LEARNING AREAS 3 (Tech)	ART 4	BIOLOGY 4	DRAMA 4	ENTREPRENEURSHIP 4	GEOGRAPHY 4	HISTORY 4	HUMAN MOVEMENT 4	LANGUAGE AFRIKAANS	LANGUAGE ENGLISH	LANGUAGE XHOSA	MATHEMATICS 4	MUSIC 4	PHYSICAL SCIENCE 4	RELIGION 4	TECHNOLOGY 4	
2006	B Ed: (GET – Intermediate/Senior Phase)	64	36	122	26	66	0	34	0	0	0	41	70	0	0	0	16	24	4	22	32	15	34	11	22	0	0	30	13	25	4	46
2007	B Ed: (GET – Intermediate/Senior Phase)	64	36	129	25	70	1	27	2	0	0	27	76	2	0	1	15	33	9	18	47	12	32	11	9	0	0	34	8	31	0	35
2008	B Ed: (GET – Intermediate/Senior Phase)	63	37	148	24	59	0	39	1	1	43	61	5	8	10	9	22	39	18	15	43	8	26	12	10	4	27	8	36	0	45	
All years	Students	399		399													53	96	31	55	122	35	92	34	41	4	91	29	92	4	126	
All years	Specialisations	934		934																												

<sup>46</sup> In the final year, students select one of three learning areas as specific subject didactics: Mathematics, Natural Sciences or Technology.

**Table 8.28: Cape Peninsula University of Technology: B Ed Specialisation (FET) graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation**

Year	CPUT			Gender		Home Language				Teaching Language			Specialisation								Subject Didactics															
	Qualification Name	Count	Average Age	% Female	% Male	% Afrikaans	% Afrikaans/English	% English	% isiXhosa	% Other	% English	% Afrikaans	% isiXhosa	COMPUTERS IN EDUCATION 4	EDUCATION PRACTICE 4	ENTREPRENEURSHIP III	GENERAL SUBJECT DIDACTICS 4	MATHEMATICS III	PHYSICAL SCIENCE III	SKILLS & LIFE ORIENTATION III	TECHNOLOGY III	BIOLOGY (EDUCATION) III	COMPUTERS IN EDUCATION 4	EDUCATION PRACTICE 4	ENTREPRENEURSHIP III	ENTREPRENEURSHIP IV	COMPUTER SCIENCE 4/IV <sup>47</sup>	ACCOUNTING IV	BIOLOGY IV	COMPUTER SCIENCE 4/IV <sup>47</sup>	ENTREPRENEURSHIP IV	MATHEMATICS 4/IV	PHYSICAL SCIENCE IV	SKILL SUBJECTS IV	TECHNOLOGY IV	
2006	B Ed: Spec	147	29	73	27	10	0	5	84	1	100	11	86	2	0	0	4	0	2	1	6	5	6	42	8	66	47	30	0	93						
2007	B Ed: Spec	89	27	79	21	28	0	1	69	2	99	28	70	0	0	0	0	0	0	0	0	0	0	34	9	53	27	22	0	57						
2008	B Ed: Spec	95	29	66	34	20	3	13	61	3	98	27	62	0	1	1	1	4	0	0	1	1	13	4	22	27	1	1	27							
All years	Students	331												2	1	5	4	2	1	7	6	89	21	141	101	53	1	177								
All years	Specialisations	619																																		

<sup>47</sup> Prior to the 'harmonisation' process, Mowbray and Wellington used Roman numerals to indicate the year level of the programme offered at their campuses and Bellville used Arabic numerals. As from 2009 all three campuses will use Arabic numerals for their subject offerings; only the area of specialisation will differ.

**Table 8.29: Cape Peninsula University of Technology: B Ed (FET) Economic and Management Science (EMS) graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation\***

CPUT	Qualification Name			Gender		Home Language				Teaching Language			Subject Didactics					
	Year	Count	Average Age	% Female	% Male	% Afrikaans	% Afrikaans/English	% English	% isiXhosa	% Other	% English	% Afrikaans	% isiXhosa	COMPUTER APPLICATIONS TECHN 4	ACCOUNTING 4	BUSINESS MANAGEMENT 4	ECONOMICS 4	MATHEMATICS 4
2006	B Ed:(FET):Economic & Management Science	36	27	61	39	50	0	44	6	0	100	81	17	18	14	23	15	13
2007	B Ed:(FET): Economic & Management Science	39	27	59	41	64	0	21	13	3	100	77	21	15	12	20	17	14
2008	B Ed:(FET): Economic & Management Science	43	25	65	35	58	0	40	2	0	100	86	9	15	9	30	18	17
<b>All years</b>	<b>Students</b>	<b>118</b>												<b>48</b>	<b>35</b>	<b>73</b>	<b>50</b>	<b>44</b>
<b>All years</b>	<b>Specialisations</b>	<b>250</b>																

\* CPUT's Mowbray and Wellington campuses offer B Ed (FET) EMS programmes based on two different academic structures, which encompasses two specialisation areas. The Bellville campus offers the B Ed (FET) Specialisation which encompasses more specialisation areas.

**Table 8.30: Cape Peninsula University of Technology: PGCE (GET – Foundation Phase) graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation**

CPUT	Year	Qualification Name	Count	Average Age	Gender		Home language				Teaching language				Subject							
					% Female	% Male	% Afrikaans	% Afrikaans/English	% English	% isiXhosa	% Other	% English	% Afrikaans	% isiXhosa	Learning Areas (Module 5)	Lifeskills Didactics (Module 4)	Literacy	Literacy (Module 3)	Numeracy A (Module 1)			
	2006	PGCE (GET – Foundation Phase)	10	36	90	10	10	0	0	80	10	10	0	80	10	10	4	7	1	8	10	
	2007	PGCE (GET – Foundation Phase)	5	34	100	0	0	0	0	100	0	0	0	100	0	0	2	5	0	3	5	
	2008	PGCE (GET – Foundation Phase)	2	46	100	0	0	0	0	50	50	0	0	50	0	0	1	1	0	2	2	
	All years	Students	17														7	13	1	13	17	
	All years	Specialisations	51																			

**Table 8.31: Cape Peninsula University of Technology: PGCE (GET – Intermediate and Senior Phase) graduates (2006-2008): qualifications by gender, home language, teaching language and specialisation**

CPUT	Year	Qualification Name	Count	Average Age	Gender		Home language				Teaching language			Subject							
					% Female	% Male	% Afrikaans	% Afrikaans/English	% English	% isiXhosa	% Other	% English	% Afrikaans	% isiXhosa	BIOLOGY	HISTORY	LITERACY	NATURAL SCIENCES	NUMERACY	TECHNOLOGY	
	2006	PGCE (GET – Intermediate & Senior Phase)	25	35	96	4	0	0	68	32	0	68	0	32	10	7	25	0	25	8	
	2007	PGCE (GET – Intermediate & Senior Phase)	23	32	87	13	9	0	65	26	0	65	9	26	10	4	11	18	18	8	
	2008	PGCE (GET – Intermediate & Senior Phase)	18	30	89	11	0	0	56	39	6	61	0	3	6	4	5	17	14	8	
	All years	Students	66												26	15	41	35	57	24	
	All years	Specialisations	198																		

**Table 8.32: Cape Peninsula University of Technology: PGCE (FET) (2006-2008): Qualifications by gender, home language, teaching language and specialisation**

CPUT		Gender		Home language				Teaching language				Specific Subject Didactics or Subject Didactics																
YEAR	Qualification Name	Count	% Female	% Male	% Afrikaans	% Afrikaans/English	% English	% isiXhosa	% Other	% English	% Afrikaans	% isiXhosa	LITERACY	NUMERACY	TECHNOL: ELECTRICAL (MOD 31)	MECHANICAL (MOD 32)	TECHNOL: TECHN. DRAWING (MOD 33)	ACCOUNTING (MOD 5)	AFRIKANS (MOD 15)	BIBLICAL STUDIES (MOD 23)	BIOLOGY (MOD 9)	BUS MANAGEMENT (MOD 6)	CONSUMER STUDIES (MOD 21)	DRAMA (MOD 11)	ECONOMICS (MOD 7)	ENGLISH (MOD 16)	FINE ART (MOD 2)	
2006	PGCE (FET)	33	45	55	6	0	76	6	12	88	6	6	2	2	4	0	0	2	2	0	0	2	20	1	0	2	0	
2007	PGCE (FET)	21	34	48	14	0	86	0	0	86	14	0	0	0	0	2	2	3	2	2	1	7	0	1	3	0	1	
2008	PGCE (FET)	38	33	68	8	0	84	8	0	84	8	0	0	0	3	1	1	6	0	0	1	0	18	3	2	3	9	
All years	Students	92											2	2	7	3	3	11	2	2	1	3	45	4	3	8	3	10
All years	Specialisations	189																										
YEAR	Qualification Name	Count	SPECIFIC SUBJECT DIDACTICS OR SUBJECT DIDACTICS CONTINUED FROM ABOVE										HISTORY (MOD 24)	GEOGRAPHY (MOD 22)	FOOD & NUTRITION (MOD 29)	HISTORY OF ART (MOD 1)	LIFE ORIENTATION (MOD 19)	MATHEMATICS (MOD 8)	PHYSICAL SCIENCE (MOD 13)	PSYCHOLOGY (MOD 14)	SKILL SUBJECTS (MOD 12)	SOMATOLOGY (MOD 30)	SPORT SCIENCE (MOD 19)	TECHNOLOGY: CIVIL (MOD 35)	TOURISM (MOD 20)	VISUAL CULTURE STUDIES		
2006	PGCE (FET)												4	0	0	0	0	10	8	0	2	0	10	0	0	0	0	0
2007	PGCE (FET)											0	1	2	1	0	4	1	2	0	2	0	1	6	1	1	0	0
2008	PGCE (FET)											0	0	1	8	7	5	1	0	0	0	2	0	1	0	3	0	
All years	Students	92											4	1	3	9	7	19	10	2	2	3	16	2	1	3	3	

**Table 8.33: Cape Peninsula University of Technology: All education graduates (2006-2008 combined) age by home language**

CPUT	Home Language											
	Afrikaans	Afrikaans/English	English	isiXhosa	German	Sesotho (south Sotho)	Sesotho Sa Leboa (North Sotho)	Setswana	Siswati	isiZulu	Other African languages	Total
AGE												
21	6		12	2								20
22	119		54	6	1							180
23	169		71	13		1						254
24	186		98	18		1						303
25	68		45	35					1	1		150
26	37		42	21				1			1	102
27	27	1	17	28		1		1			1	76
28	9	1	17	30							1	58
29	13		9	21							1	44
30	4		9	12								25
31	7		6	21		1	1					36
32	4		10	10								24
33	3		8	11								22
34	2	2	13	12				1				30
35	2		9	9								20
36	2		10	3								15
37	1		4	6								11
38	1		8	4								13
39			3	5								8
40			3	3								6
41	1		2	5								8
42	1		2	4								7
43			3	3								6
44			4	1								5
45	1		4									5
46			2									2
47	1		2									3
48	1	1	3									5
49			1	2								3
50		1	1	1								3
51			3									3
53				1								1
54			2									2
56			2									2
67			1									1
<b>Total</b>	<b>665</b>	<b>6</b>	<b>480</b>	<b>287</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>1453</b>

*University of Cape Town*

Table 8.34-8.41 provide data for the University of Cape Town (UCT).

**Table 8.34: University of Cape Town: PGCE (GET – Intermediate and Senior Phase) graduates (2006-2008) by gender\***

UCT Year	Gender		Total
	Female	Male	
2006	25	3	28
2007	30	6	36
2008	19	5	24
<b>Total</b>	<b>74</b>	<b>14</b>	<b>88</b>

\* Students study all eight learning areas

**Table 8.35: University of Cape Town: PGCE (GET – Intermediate and Senior Phase) graduates (2006-2008 combined): home language by gender**

UCT Home Language	Gender		
	Female	Male	Total
Afrikaans	4		4
English	67	13	80
isiXhosa	2	1	3
Other	1		1
<b>Total</b>	<b>74</b>	<b>14</b>	<b>88</b>

**Table 8.36: University of Cape Town: PGCE (GET – Intermediate and Senior Phase) graduates (2006-2008 combined): age by gender**

UCT 2006 to 2008 Age	Gender		Total
	Female	Male	
21	1		1
22	4	1	5
23	10		10
24	21	2	23
25	12	2	14
26	8	2	10
27	3		3
28	2	1	3
29	3	1	4
30	5		5
31	1	1	2
32	1		1
33	1	1	2
35	1		1
38	1		1
44		1	1
45		1	1
46		1	1
<b>Total</b>	<b>74</b>	<b>14</b>	<b>88</b>

**Table 8.37: University of Cape Town: PGCE (Senior and FET)\* graduates (2006-2008) by learning area/subject specialisations**

UCT Year	Accountancy	Art	Biology	Design	Economics	English	Geography	Guidance	History	Mathematics	Physical Science	Speech & Drama	Total
<b>2006 Total</b>	0	4	6	3	4	19	1	12	10	9	1	6	<b>75</b>
<b>2007 Total</b>	0	1	8	2	0	13	3	5	12	14	4	0	<b>62</b>
<b>2008 Total</b>	3	3	9	3	0	21	2	6	14	16	2	5	<b>84</b>
<b>Method Totals</b>	<b>3</b>	<b>8</b>	<b>23</b>	<b>8</b>	<b>4</b>	<b>53</b>	<b>6</b>	<b>23</b>	<b>36</b>	<b>39</b>	<b>7</b>	<b>11</b>	<b>221</b>

\* Secondary teaching

**Table 8.38: University of Cape Town: PGCE (Senior and FET) graduates (2006-2008 combined): specified method subjects**

UCT Method Pairs 2006 to 2008	Single	Design	English	Geography	Guidance	History	Mathematics	Physical Sci.	Speech & Drama	Row Pairs	Total Methods
Accountancy	1		1				1			3	<b>3</b>
Art	2	5	1							8	<b>8</b>
Biology	5			2	2	1	11	2		23	<b>23</b>
Design	2		1							3	<b>8</b>
Economics							4			4	<b>4</b>
English	8				12	24	3		3	50	<b>53</b>
Geography	1				1	2				4	<b>6</b>
Guidance						1	4		3	8	<b>23</b>
History	4		1						3	8	<b>36</b>
Mathematics	7				2			7		16	<b>39</b>
Physical Sciences										0	<b>7</b>
Speech & Drama	1					1				2	<b>11</b>
Column Pairs	31	5	3	2	15	28	23	7	9	129	
<b>Total students</b>										<b>123</b>	<b>221</b>

**Table 8.39: University of Cape Town: PGCE (Senior and FET) graduates (2006-2008 combined): gender by home language**

UCT 2006 to 2008 Gender	Home Language									
	Afrikaans	Eng & Afr	English	IsiXhosa	North Sotho	Setswana	Spanish	Unknown	Xitsonga	Total
Female	2	1	80		1	1	1			86
Male			29	5		1		1	1	37
<b>UCT Total</b>	<b>2</b>	<b>1</b>	<b>109</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>123</b>

**Table 8.40: University of Cape Town: PGCE (Senior and FET) graduates (2006-2008 combined): age by gender**

UCT 2006 to 2008 Age	Gender		Total
	Female	Male	
21	7		7
22	11		11
23	16	3	19
24	17	7	24
25	10	6	16
26	10	3	13
27	2	4	6
28	1	2	3
29		3	3
30	4		4
31	1	2	3
32	1		1
33	1	1	2
34	1	1	2
35		1	1
36	1		1
37		1	1
43		1	1
45	2		2
47	1		1
61		1	1
<b>Total</b>	<b>86</b>	<b>37</b>	<b>123</b>



UCT also provided nine **B Mus (Education)** graduates in all in 2007 and 2008. All graduates are female. Five of the graduate students were 22 years old; three were 23 years old; and one was 30. The home language of seven of the graduate students is English; one graduate speaks Chinese at home; and another South Sotho.

### **Conclusions**

Data in Tables 8.1-8.41 show the following trends:

- The largest provider in the Western Cape of new teachers is currently the Cape Peninsula University of Technology.<sup>48</sup>
- Only the University of Stellenbosch and the Cape Peninsula University of Technology are providing new Foundation Phase teachers. Data in Table 8.1 show that the combined count for both HEIs for B Ed Foundation Phase students in 2006 is 208. In 2007 the count is 186. In 2008, the count is 224. If the CPUT PGCE (GET – Foundation Phase) students are included, the grand total of Foundation Phase graduates in 2006 is 218. In 2007, it is 191, and in 2008, it is 226.
- There are very low counts of isiXhosa and other African language home language student graduates for teaching Foundation Phase. Data in Table 8.26 show that only 1% per year of CPUT Foundation Phase B Ed graduates had isiXhosa as a home language (i.e. a total of 15 for the period 2006-2008). Data in Table 8.30 show only one PGCE (GET – Foundation Phase) graduate in 2006, and one in 2008, had isiXhosa as a home language. This low count is of great concern given the current policy of home-language instruction in early school years.<sup>49</sup>
- Overall there are low counts of isiXhosa and other African language home language 2006-2008 education graduates. Data on students' race was not specifically requested and obtained from all four HEIs. However, data on 2008 students' population group collected through the Student Survey, show that 374 (57%) of the 656 students surveyed classified themselves as 'white'; 176 (25%) classified themselves as 'coloured'; 90 (14%) classified themselves as 'African'; 5 (1%) classified themselves as 'Asian/Indian'; and 18 (3%) chose not to respond to the question. Low numbers of black, in particular African, graduates are an obstacle to Employment Equity.

---

<sup>48</sup> By contrast, a count of institutions at which the sample of the current teaching force obtained their qualifications showed that the highest proportion (a count of 1 578) of the qualifications had been obtained from the University of the Western Cape, followed by the proportion of the qualifications that had been obtained from the Cape Peninsula University of Technology (count = 291).

<sup>49</sup> Although learner enrolment for the Province decreased from 915 619 learners in 2007 to 912 720 learners in 2008, WCED allocated 364 additional Foundation Phase teaching posts in high poverty schools in 2008. The plan is to reduce learner:teacher ratios in the Foundation Phase and allocate an additional 150 new Foundation Phase posts in 2009. (WCED, January 2009:3 and 6). In 2009 staff establishments in schools in high poverty areas 'allow for learner to teacher ratios of at least 33:1 in high schools and 37:1 in primary schools' (Cape Times, 20/01/2009:6).

- Large numbers of Afrikaans home language students at the University of Stellenbosch, the University of the Western Cape, and the Cape Peninsula University of Technology (see, for example, Tables 8.3, 8.13, 8.18 and 8.33).
- In relation to Mathematics and Physical Sciences, the majority of Intermediate/Senior Phase B Ed graduates are provided by the Cape Peninsula University of Technology (see Table 8.27).
- The majority of Mathematics and Physical Sciences specialisation B Ed (FET) graduates for the period 2006-2008 were provided by the Cape Peninsula University of Technology. However, there appears to be a sharp decline in the number of Physical Sciences B Ed Specialisation (FET) graduates at CPUT from 22 students in 2007 to one student in 2008 (see Table 8.28).
- Low counts overall of Mathematics and especially Physical Sciences PGCE secondary teaching graduates (i.e. graduates with first general degrees in Mathematics or Physics and/or Chemistry). The main provider of Mathematical Literacy PGCE secondary teachers appears to be the University of Stellenbosch (see Table 8.12). The main provider of Mathematics PGCE secondary teachers appears to be the University of Cape Town (see Tables 8.37 and 8.38).
- There is a relatively high count overall of Life Orientation/School Guidance/Educational Psychology graduates.

### 8.1.1 2008 graduate students' intentions after qualifying

The Student Survey administered to 2008 graduating students at the four HEIs asked students what their intentions were after qualifying. Students were also asked to provide reasons for their intentions. Table 8.42 shows the number and percentage of the 656 students who selected the options provided:

**Table 8.42: Students qualifying in 2008 (UCT, UWC, US, and CPUT combined): stated intention after qualifying**

<b>Intention</b>	<b>Number</b>	<b>Percentage</b>
To teach at a <b>WCED school</b>	397	61
To teach at a <b>private school</b> in the Western Cape	28	4
To teach at a school in <b>another province in South Africa</b>	47	7
To teach in <b>another country</b>	60	9
To <b>study further full-time</b>	50	8
To work <b>outside of the teaching profession</b>	16	2
<b>Unsure</b>	31	5
<b>Other</b>	15	2
<b>Missing</b>	12	2
<b>Total</b>	656	

- Data in Table 8.42 show that 61% of the students said that they would like to teach at a WCED school. Reasons provided included the desire to make a contribution and a commitment to improving education and helping school children in the Province, and the need to pay back bursaries or student loans. A number of other students indicated that they would have selected this option but had decided to follow other avenues because ‘there is NO work for young teachers in South Africa. We complete a 4-year course, and none of us have found work yet for next year’ (student’s emphasis). Some students said that they would take the first job offer they received, regardless of whether it was in a private school, in the private sector or in another country.
- About 9%, that is 60 students, said they intend teaching in another country. Twelve of these students reported that they are foreigners who are returning home. Some of the South African students reported that they intended teaching outside of South Africa because they wanted the opportunity to ‘see the world’. Others believed that teaching in another country would enable them to repay their student loans more quickly. Some students indicated that they felt that they had been driven to this option, as one student wrote: ‘I have applied for 32 posts and (even as a bursary holder) did not get one. Therefore I am leaving for Dubai’. A number of South African students implied that their intention is to return to South Africa once they have achieved their goals.
- About 8% said they intended to study further. This option is pursued by some students because they had not managed to secure teaching posts, and saw improving their qualifications as a means of increasing their job prospects, or of following an alternative education-related career. Some students indicated that they are using their teacher training as stepping-stones to other professions, for example, as Educational Psychologists.
- About 7% of the students intended teaching in another province. Most of these students are returning to their home provinces, especially in the Eastern and Northern Cape.
- Some 5% of the students were unsure of their intentions. This uncertainty arose mainly amongst young students who had not been able to secure posts or who felt that they had not yet explored all their options.
- About 4% indicated that they intended teaching at private schools. Some of these students chose this option because they already had posts in private schools.
- A few students indicated that they are already employed in an institution other than a school (for example, an FET college or a company).

Graduating students were also asked whether they actually have a teaching post confirmed for 2009 and, if so, where the post is. Table 8.43 shows the number and percentage of the 656

students who reported that they have posts in public or private schools the Western Cape; another province in South Africa; or in another country in 2009.

**Table 8.43: Students who said they have teaching posts in 2009 as at the end October 2008**

<b>Post</b>	<b>Number</b>	<b>Percentage</b>
At a WCED school	51	8
At a private school	19	3
In another province	11	2
In another country	21	3
<b>Total</b>	<b>102</b>	<b>16</b>

Only 102 students indicated on the day of the survey that they had posts in 2009. The largest proportion of these students said they had posts at WCED schools (51), followed by the proportion of students who said they had posts in another country (21), and then by the proportion of students who said they had posts at private schools (19).

### ***Conclusions***

As noted in Chapter 4, section 4.4.2, the Student Survey was administered to students before the end of October (as close as possible to the time when they wrote their final examinations). The end of October is too early for students to have been informed as to whether applications for posts at WCED schools had been successful or not. Nevertheless, data presented in Chapter 7, section 7.1, indicates that only a small proportion of the teachers currently employed in the sample schools are in the 19-29 age group, and hence suggests that there is a fairly low rate of younger teachers joining the system. Yet, more than 60% of the cohort of 2008 IPET student graduates indicated that they would like to teach at a WCED school.

These factors suggest that reported teacher shortages are not translating into available jobs for newly qualified teachers. This study is not able to discern whether the dominant cause is a poor match of student skills/subjects to WCED vacancies, or perhaps the delays students experience until a successful application is confirmed, or some other factor.

### **8.2 Other people potentially available for teacher supply**

Obviously new teacher graduates are the main source for increasing teacher supply, but there are other people who are potentially available. This section draws on an analysis in the report compiled by Derek Yu (2008) of the Department of Economics, University of Stellenbosch on the labour market status of the graduates whose study field is education, training or development in the Western Cape province. Data from Statistics South Africa's Census 2001 and last four available Labour Force Surveys (LFSs) – LFS2006 March, LFS2006 September, LFS2007 March, and LFS2007 September, were used as sources of information about potentially available

people for teacher supply ('spare capacity') by identifying the number of unemployed people who studied education and/or had previous jobs in education<sup>50</sup> (8.2.1) and the labour force participation rate (LFPR) of people from the education field (8.2.2).

### 8.2.1 Unemployed whose study field is education, training or development

This section examines the characteristics of the unemployed whose study field is education. Since the Census did not ask too many questions on the characteristics of the unemployed, the labour force participation rate (LFPR) data were the focus of the analysis. Table 8.44 below shows that nearly 40% of the unemployed in the Western Cape claimed they have never worked before. On the other hand, more than half of the unemployed used to be employed in semi-skilled or unskilled occupations. *Only 0.2% of them reported that they were employed in teaching occupations* before they became unemployed at the time of the survey.

**Table 8.44: Previous occupations of the broad unemployed in the Western Cape**

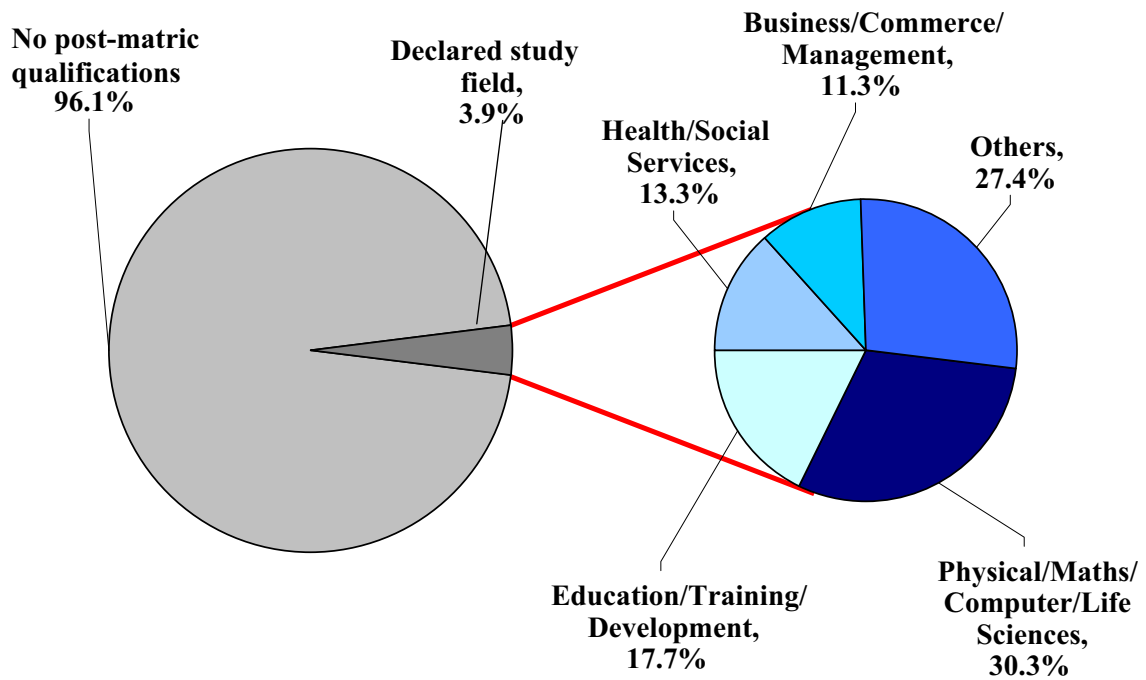
Previous occupations	Percentage
Teaching occupations	0.2
Highly-skilled occupations, excl. teaching occupations	4.4
Semi-skilled occupations	26.9
Unskilled occupations	30.0
Never worked before	38.5
	100.0

In addition, Figure 8.1 below shows that almost all of these unemployed people were poorly educated, as 96.1% of them did not have post-Matric qualifications (and hence were not asked the question on study field in the survey – see footnote). *Inspecting the remaining 3.9%, slightly below one-fifth (17.7%) of them were graduates from the education field.*

---

<sup>50</sup> The reason for using the last four Labour Force Surveys for the analysis instead of only using one LFS is that the unweighted LFS sample is relatively small for focusing on one occupational group alone – only about 7000-8000 people from the working-age population (i.e. 15-65 years) in the sample from each survey come from Western Cape, while the unweighted sample size of the same group of people is approximately 260,000 in Census 2001. Hence, it was decided to analyse the last four LFSs, and the person weight variable from the four LFSs is divided by four to derive the weighted figures for the analysis. Unless stated otherwise, 'Census' and 'LFSs' stand for Census 2001 and the four LFSs respectively.

**Figure 8.1 Study fields of the broadly unemployed in the Western Cape, LFPRs**



A brief analysis of the characteristics of the unemployed in the education field is presented in Table 8.45.

**Table 8.45: Characteristics of the unemployed by study field in the Western Cape (n= 1 250)**

	Study field			All unemployed
	Education	Others	n/a*	
<b>Gender</b>				
Male	41.3%	40.4%	44.8%	44.6%
Female	58.7%	59.6%	55.2%	55.4%
	100.0%	100.0%	100.0%	100.0%
<b>Race</b>				
Black	37.2%	40.3%	43.6%	43.4%
Coloured	4.1%	22.3%	51.2%	50.0%
Indian	6.2%	0.0%	0.2%	0.2%
White	52.5%	37.4%	5.0%	6.4%
	100.0%	100.0%	100.0%	100.0%
<b>Highest educational attainment</b>				
None-Incomplete primary	0.0%	0.0%	12.0%	11.5%
Incomplete secondary	2.2%	15.3%	65.0%	63.0%
Matric	0.0%	0.0%	23.0%	22.1%
Matric + Cert/Dip	68.5%	50.8%	0.0%	2.1%
Degree	29.3%	34.0%	0.0%	1.3%
	100.0%	100.0%	100.0%	100.0%
<b>Why not working</b>				
Seasonal/Contract workers	9.2%	0.7%	3.4%	3.4%
Lack of skills	0.0%	0.2%	3.8%	3.6%
Has found a job and will start soon	0.5%	1.3%	1.4%	1.4%
Cannot find work	69.4%	70.1%	79.0%	78.6%
Others	21.0%	27.7%	12.5%	13.1%
	100.0%	100.0%	100.0%	100.0%
<b>Action to look for work</b>				
Active action	99.6%	88.4%	75.0%	77.9%
Passive action	0.0%	6.7%	11.1%	11.2%
Waiting at street side	0.4%	0.6%	8.0%	8.0%
Others	0.0%	4.3%	5.8%	2.9%
	100.0%	100.0%	100.0%	100.0%
<b>Duration of looking for work</b>				
Less than 1 month	5.0%	20.2%	12.4%	12.6%
1-6 months	45.1%	36.8%	34.2%	34.3%
6-12 months	16.3%	11.0%	16.3%	16.2%
1-3 years	1.8%	23.0%	19.5%	19.4%
More than 3 years	31.9%	8.9%	17.7%	17.5%
	100.0%	100.0%	100.0%	100.0%
<b>Ever worked before</b>				
Yes	71.9%	76.5%	60.93%	61.5%
No	28.1%	23.5%	39.07%	38.5%
	100.0%	100.0%	100.0%	100.0%

\* This group accounts for the people who were not asked to declare their study field in the survey.

It can be seen that unemployed people from the education field are not so different from the unemployed in other study fields, as nearly three quarters of them claim that they did not work simply because they could not find work; active action (e.g., placed/answered advertisements,

enquired at workplaces, etc.) was taken by almost all of them when seeking work; and approximately three quarters of them claimed they have worked before. In addition, more than half of them are females, and approximately 40% of them are black. Finally, they are generally well educated, as more than three quarters of them have post-Matric qualifications.

### **8.2.2 Labour force participation rate of people from the education field**

Section 8.2.2 examines conditions of service of those already employed in the education field and the LFPR of people from the education field so as to identify factors that induce education graduates (and employed teachers) to opt for work in non-teaching occupations. Yu's Report includes:

- the profile of graduates from the education, training or development study field
- the demographic characteristics as well as the working conditions and remuneration of the employed in teaching occupations regardless of their study fields
- a comparative analysis of the graduates from education, training or development and non-education fields who are employed in teaching occupations.

Tables 8.46-8.64 and Figures 8.2 and 8.3 in Appendix H provide data on graduates from the education field, the employed in teaching occupations and the broad LFPR of people from the education field.

Key findings emerging from Yu's extensive analysis of the data (relevant to the ESDA) about the working conditions of those already employed in the education field in the Western Cape show that conditions of service are relatively stable and favourable. For example,

- The employed in teaching occupations have longer tenure with their employers compared with the other employed. The group employed in primary education institutions has got the longest tenure on average (14.8 years).
- More than 80% of employed in teaching occupations enjoy permanent employment and employers' contributions towards their pension funds.
- Approximately 90% of those employed in teaching occupations have written contracts with their employers, have their work supervised, and are entitled to paid leave.
- About 60% of those employed in teaching occupations are union members, but this proportion is the highest in the secondary teaching professionals (79.2%) and lowest in the tertiary teaching professionals (24.1%).
- Some 90% of the employed in teaching occupations have their work hours fixed by the employer. On average, the tertiary and secondary teaching professionals work the longest hours (about 40 hours per week). Only 9.5% of the employed in teaching occupations are

willing to work longer, but this proportion is the highest (nearly 25%) amongst the tertiary teaching professionals.

Main findings on the broad labour force participation rate of people from the education field that emerge from Yu's report are:

- The unemployment rate from the education field in the *Western Cape* is very close to the overall unemployment rate of all graduates (approximately 7%). However, the broad labour force participation rate (LFPR) of people from this field is relatively lower, compared with people from other study fields.<sup>51</sup> This contrast would seem to indicate that many people in this field leave the labour market (perhaps largely as housewives). The data shows that the LFPRs of females (especially white and coloured females) are clearly lower than the LFPRs of males).
- **District Councils (DC):** The LFPR in the Overberg District Municipality is relatively lower than the LFPRs of other District Councils (i.e. Boland, West Coast, Eden, Central Karoo, City of Cape Town), while the education graduates in the Central Karoo District Municipality are more likely to be unemployed (the only DC with unemployment rate exceeding 10%).
- **Area type:** People from urban areas have higher LFPR but slightly higher unemployment rate, and a higher proportion of them are involved in teaching occupations, compared with those from rural areas.
- **Race:** Despite the fact that the black LFPR is the highest amongst the four race groups, the black unemployment rate is much higher than the white rate. This anomaly might imply something about perceptions of the quality of education of the black education graduates. On the other hand, it is quite surprising that the white component of inactive, as well as the white LFPR is quite high.
- **Gender:** The female component of the economically inactive is very high (more than 80%). However, approximately 70% of employed in teaching occupations are also female.
- **Home language:** For the graduates speaking African languages, the LFPR is higher, but the unemployment rate is also obviously higher, and the proportion of employed in teaching occupations is lower, compared with people speaking English or Afrikaans.
- **Age:** The unemployment rate shows a continuous downward trend as one examines the older age groups.

---

<sup>51</sup> Note that in both Census and LFSs, only the people whose highest educational attainment at the time of the survey was 'Certificate/Diploma without Matric', 'Certificate/Diploma with Matric', 'Degree', 'Degree plus Diploma/Honours' or 'Master/PhD' were asked the question on the field of study. Also, the number of study field categories differs between the two surveys, as there are 23 and 14 categories in Census and LFSs respectively.

- ***Educational attainment:*** The unemployment rate keeps declining as one examines the more educated groups. In addition, for people with Masters or PhD, the proportion of them involved in teaching occupations is relatively small. This observation might imply that, due to their high educational attainment, they opt to work in non-teaching occupations with higher remuneration.

In conclusion, observations emerging from Yu's analysis that are pertinent for the ESDA are that:

- The proportion of all graduates from the education field that end up actually working in the teaching occupations is the lowest in the Western Cape, compared with other provinces.
- Examining the earnings of employed in teaching occupations by province, Western Cape and Gauteng are actually the provinces that pay teachers the highest on average. However, this high averages arise because teachers in these provinces are better qualified.
- The remuneration in other highly-skilled non-teaching occupations is higher in the Western Cape than in other provinces. This difference could be an important factor that induces education graduates (and employed teachers) to opt for work in non-teaching occupations. A further factor that needs to be taken into account is that, Crouch and Perry, (2003) show that, although teaching initially has a salary advantage over other professions, after five years other professions overtake teacher salaries. The pay advantage tends to disproportionately favour the young and less-qualified teachers, and declines with age and qualification.

Chapter 9 concludes this report by using the main findings to make recommendations.



## **PART 3: MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

### **CHAPTER 9: MAIN FINDINGS AND RECOMMENDATIONS**

Chapter 9 concludes this report by

- a) summarising the main findings and some of the implications of these findings, and making a set of recommendations to the WCED and HEIs in the Western Cape around *teacher supply and demand* (section 9.1)
- b) outlining recommendations for the WCED and the CHEC Board in relation to setting up *systems for the future* (section 9.2)

#### **9.1 Recommendations for teacher supply and demand**

There are three sets of recommendations, one for each of the following:

- Western Cape Education Department (9.1.1)
- Western Cape Education Department and the four Western Cape Higher Education Institutions (9.1.2)
- Higher Education Institutions (9.1.3).

##### **9.1.1. Recommendations for the Western Cape Education Department**

The following fourteen recommendations for teacher supply and demand are linked to the main findings. Each of the fourteen recommendations is preceded by a paragraph that summarises the issue under discussion. Findings and recommendations are organised into six focus themes:

1. Meeting formal REQV Requirements
2. Matching teachers to posts
3. Teacher professional development
4. Teacher retention and mobility, and employment equity
5. Strengthening the teacher pool
6. The impact of language and demographic shifts.

#### **THEME 1: Meeting formal REQV requirements**

*According to Norms and Standards for Educators (DoE, 2000a) the current minimum qualification requirement to be considered 'qualified' is the Relative Education Qualification Value (REQV) 13 level or a three-year post-school qualification (M + 3). The current definition of 'under-qualified' is REQV 12 or lower. However, in future the requirement will be REQV level 14, that is, M + 4 and teachers at REQV 13 will also be evaluated as 'under-qualified'.*

### **Finding 1**

According to 2008 PERSAL data (SAIDE, 2008) about 5% of Western Cape teachers are unqualified or under-qualified (M + 1/2) in terms of *current* requirements. However, 10 245 WCED employed teachers (out of 30 640) are un- or under-qualified in terms the *future* requirement of M + 4. This count implies that 33% will be under-qualified. Analysis of the Educator Questionnaire data suggest that around one quarter (26%) of the sample teachers between the age of 30-49 and about a third (34%) of the 50-59 age group will need to upgrade their qualification in terms of future (M + 4) requirements. Data indicate that there are teachers in both Metro East and Eden and Central Karoo Education Districts who need to upgrade their qualifications from M + 3 to M + 4. The proportion of teachers in the *rural* district who need to upgrade their qualifications for future requirements is, however, higher than the proportion of teachers in the *urban* district.

**RECOMMENDATION 1: WCED needs to plan for teacher professional development to address the upgrading of un- and under-qualified teachers, especially in terms of future requirements (M + 4), with priority given to teachers in the 30-49 age group. Access to in-service opportunities for rural teachers to upgrade their qualifications for new requirements needs to be ensured.**

### **THEME 2: Matching teachers to posts**

*Whilst a teacher's REQV is useful for the purpose of determining whether the teacher has formal accredited or recognised qualifications and is not un- or under-qualified in terms of the minimum qualification currently required (i.e. REQV 13 level), the REQV level on its own does **not** indicate whether or not teachers are 'adequately qualified' for the teaching of a learning area/subject in a particular phase/grade (i.e. specialisation in the learning areas, subject and or phases that they are expected to teach). One of the main foci of the data analysis for this study was the actual match between teachers' subject specialisations, and the school level they were trained to teach according to their qualifications, with their current teaching responsibilities.*

### **Finding 2**

The study found that schools have to grapple with allocating and timetabling existing teaching staff with subject specialisations obtained under a different system, into new areas of the school curriculum. As a first layer of data analysis for matching teachers to posts, a team examined information provided in each Educator Questionnaire (administered to the sample of teachers) to assess the degree of 'match' between each teacher's qualifications and the grades and learning areas/subjects teachers reported that they were teaching in 2008. This assessment of teacher to

teaching field ‘match’ suggests that about 84% of the sample of teachers were teaching, at least partially, within their field of expertise or field of study. Researchers also noted that some teachers were clearly employed in posts on the basis of their informal INSET training, or other training they had received, for example, training in computer literacy.

However, the researchers also noted that some schools do not appear to be using the current stock of teachers effectively or efficiently (for example, teachers with subjects in short supply are not always teaching these learning areas/subjects in the schools, and some teachers are expected to teach too many learning areas). There was also some evidence of un- or under-qualified or inappropriately qualified people being employed in SGB posts. Indications are that, in the absence of specific requirements/criteria for subject and school level teaching, principals and school leadership (who have the task of assigning teachers in the timetabling), and SGBs (who have the power to appoint people in SGB paid posts and to recommend teachers for employment by the WCED) do not always have the necessary knowledge to make the appropriate placements or allocations.

**RECOMMENDATION 2: In order to ensure that teachers are assigned to teaching grades and learning areas/subjects that they are qualified to teach:**

- **There is a need for clearer criteria for the teacher qualifications required for each learning area/subject at each phase so that mechanisms for matching teachers to posts can be firmly put into place.**
- **There needs to be school leadership and SGB training around the importance of subject specialisations and appropriate qualifications, and in managing teacher allocations well, especially in quintile 1-4 schools.**
- **The Department needs to consider the implications of the wide range and integrated nature of the GET learning areas offered.**

**THEME 3: Teacher professional development**

*The changing parameters of the qualifications required around school levels and aspects of the curriculum mean that the existing stock of teachers in the system is not always appropriately qualified for current curriculum needs. The study used the learning area/subject and grade level as the unit of analysis to establish which GET learning areas/FET subjects are most commonly taught by teachers who are teaching **out-of-field** or area of specialisation or level of professional teaching qualification. The analysis also established what subject specialisations teachers, deemed to be teaching **within their field of expertise**, most commonly have (for example, to*

*establish the extent to which teachers with 'appropriate' subject qualifications to teach Arts and Culture tend to have Music, or Art, or Dance, or Drama in their qualifications).*

### **Finding 3**

Findings from Educator Questionnaire data are that reduced capacity in subject expertise is most evident amongst teachers in the Intermediate/Senior Phase or middle school years for the 'newer' more integrated learning areas of Economic and Management Sciences and Arts and Culture. Teachers reported spending more time preparing for teaching because of having to teach new learning areas but also because of *dimensions* of learning areas/subjects that are out of their field of training.

From the data analysis of the GET learning areas where intermediate and senior teachers are teaching *within their field of expertise*, the following patterns emerge regarding the subjects covered in their qualifications:

- teachers teaching Natural Sciences more commonly have Biology as a subject in their qualifications than Physical Sciences
- teachers teaching Social Sciences more commonly have History than Geography
- teachers teaching Economics and Management Sciences more commonly have Accounting, Economics or Business Economics rather than Business Studies
- teachers teaching Life Orientation most commonly have Bible Studies, before Psychology/Guidance and Counselling and Physical Education/Human Movement Studies
- teachers teaching Technology more commonly have Technology (in general), Home Economics or Needlework and Dressmaking or Computer Literacy rather than Technical Drawing/Design, Metal/Woodwork, or Electrical or Mechanical Technology
- teachers teaching Arts and Culture most commonly have Music, then Art and Crafts, then Human Movement Studies rather than Fine Arts, Drama or Dance *per se*.

Data from the Educator Questionnaires on the subject specialisations, that FET teachers teaching *within their field of expertise* more commonly have, for teaching the 'newer' or more work-related FET subjects, indicate that:

- teachers teaching Agricultural Sciences more commonly have Biology than Agricultural Sciences
- teachers teaching Civil Technology more commonly have Computer Applications Technology than Technical/Building Drawing

- teachers teaching Computer Applications Technology more commonly have Typing than Computer Studies/Information Technology
- teachers teaching Consumer Studies more commonly have Business Economics/Economics, and then Needlework or Home Economics, rather than Business Studies/Marketing
- teachers teaching Dance Studies more commonly have Human Movement Studies than Dance *per se*
- teachers teaching Design more commonly have Art than Graphic Art/Art Design
- teachers teaching Engineering, Graphics and Design more commonly have Technology (in general) than Technical/Engineering Drawing or Design Technology
- teachers teaching Information Technology more commonly have Information Literacy than Information Technology or Computer Studies
- teachers teaching Life Sciences most commonly have Biology
- teachers teaching Life Orientation most commonly have Bible Studies, then Psychology/Guidance before Physical Education
- teachers teaching Mechanical Technology more commonly have Technology (in general) than Mechanical Technology or Engineering Technology
- teachers teaching Religion Studies more commonly have Bible Studies or Scripture than Religion Studies
- teachers teaching Tourism more commonly have History than Geography
- teachers teaching Visual Arts more commonly have Art (Practical) than Art Design.

The above have implications for teacher in-service and upgrading programmes.

**RECOMMENDATION 3: Where learning areas or subjects ideally require more than one subject specialisation, identified gaps in content knowledge should be addressed through appropriate and targeted professional development courses.**

### **THEME 3 (contd)**

*An important assumption underpinning this study is that **subject matter knowledge** is key for successfully teaching a particular subject. Whilst limited associations in international research have been found between teacher qualifications and learning outcomes assessed through pass rates or results of systemic testing (Boe and Gilford, 1992); in South Africa, a study by Crouch and Mabogoane (2001) identified teacher qualifications as strongly correlated with matric results. The Progress in International Reading Literacy Study (PIRLS) 2006 also found that learners taught by Language teachers who reported having post-graduate degrees showed an*

*'improved overall mean performance' in comparison to learners whose teachers were not as well qualified (Howie et al, 2007). Furthermore, analysis of data from the Southern (& Eastern) Africa Consortium for Monitoring Educational Quality II (SACMEQ II) by Van der Berg (2005:69) showed that, in South Africa, and in the Western Cape in particular, children in affluent or 'least poor' schools 'the top layer of schools (historically white and Indian schools)' performed significantly better than children in 'schools with a lower mean SES [lower socioeconomic status] (historically black schools)'.*

*A particular interest of the study was to establish whether classes in higher-poverty schools are more often taught by teachers teaching out of their subject field and school level professional qualification. Thus, included in the data analysis is comparative data on quintile 5 schools (the least poor schools) as compared to non-quintile 5 schools (i.e. quintile 1-4 schools combined).*

#### **Finding 4**

Educator Questionnaire data suggest that in the *middle school years* (in particular in the Intermediate Phase) learning areas such as Mathematics and Natural Sciences are being taught by teachers who teach at grade levels *beyond their levels* of subject expertise. The cumulative nature of these knowledge domains means that teacher *under-preparedness* at the middle school level may be contributing to a cumulative deficit in learners' achievement in later grades. The data suggest that the situation in the quintile 5 and quintile 1-4 schools in 2008 was not very different.

Educator Questionnaire data indicate that, in 2008, the *core FET subjects* of Afrikaans, English, isiXhosa, Geography, History, Life Sciences, Mathematics, Mathematical Literacy and Physical Sciences were mostly taught by teachers who have a major or at least a minor course in the subject they were teaching (as opposed to out-of-field teaching). Core subjects in quintile 5 and non-quintile 5 schools were mostly taught by teachers who have a major or at least a minor course in an 'acceptable' subject for the subject they were teaching. However, the proportion and percentage of teachers with a major or a minor subject *and acceptable professional teaching qualification to teach at the FET level* is lower than the proportion with an acceptable subject in a qualification (generally, approximately 20% lower). For example, data suggests that 95% of Grade 10 Mathematics teachers have Mathematics as a subject in their qualifications but only 78% of these teachers also have a professional teaching qualification for teaching at the FET level. The data suggest that the situation with regard to core subjects in the quintile 5 and non-quintile 5 schools in 2008 was not very different.

Researchers who examined the Educator Questionnaire data noted that the careers of teachers trained in education departments other than the House of Assembly (HoA), called in the Western

Cape the Cape Education Department(CED), have tended to exhibit a more ‘circuitous’ route to reach an equivalent qualification level or destination. For example, whilst many House of Assembly trained FET level teachers currently employed started off with a 3-year general degree and a 1-year Postgraduate Diploma in Education<sup>52</sup>; teachers trained in other education departments often started with a 2/3-year teaching certificate or diploma. In some cases such qualifications were followed by a first general degree; in others a teaching certificate or diploma was followed, through recognition of prior learning, by a 1-year full-time (or 2-year part-time) B Ed or a B Tech (Ed) conversion to a degree. Such qualification routes mean that some secondary school teachers have a ‘conversion B Ed’ but do not have a first general degree. Others have obtained an Advanced Certificate of Education (ACE). Some teachers with general degrees have primary professional qualifications obtained prior to their degree but no secondary teaching qualifications, or have post-graduate qualifications after their degree that are not specifically professional ‘secondary’ teaching qualifications.

To further explore a possible association between the school-level socioeconomic status and teacher qualifications, we compared data from the Educator Questionnaires on teachers of core FET subjects in the quintile 5 schools and non-quintile 5 schools, *with* a first general degree, and with a first general degree as well as a professional qualification for teaching at the secondary school level.

This investigation suggests that, whilst evidence from the Educator Questionnaire is that most teachers have a qualification with a course in the FET core subject they teach, a greater proportion of teachers *with a first general degree* (and with a first degree and secondary qualifications) are teaching core FET subjects in quintile 5 schools than in schools in quintiles 1-4 combined. This finding indicates inequity between higher-poverty and more affluent schools in the distribution of more highly specialised teachers of core subjects (Afrikaans, English, isiXhosa, Geography, History, Life Sciences, Mathematical Literacy, Mathematics, and Physical Sciences).

**RECOMMENDATION 4: The issue of equivalent qualifications and a common curriculum structure will be addressed in future through a single Higher Education Qualification Framework (HEQF). However, it is important that the focus of ongoing professional development for middle and secondary school in-service teachers, especially those teachers without first degrees in the core subjects/learning areas they teach, is on deepening their content knowledge. To achieve this deepening the capacity and expertise to deliver curriculum-based in-service support to teachers needs to be in place.**

---

<sup>52</sup> For an explanatory framework of teachers’ qualifications, with examples refer to Table 4.1 in Chapter 4.

### **THEME 3 (contd)**

*The importance of **Grade R** teachers who are properly prepared and trained to develop early literacy skills in schools serving low socio-economic communities cannot be underestimated. Without competent Grade R teachers, learners who come from home environments which are not supportive of early literacy skills are more likely to enter Grade 1 under-prepared with the skills that ought to be developed during this pre-school year. The achievement gap between these learners and children who enter Grade 1 with well-established literacy skills is more likely to widen through primary schooling.*

*It is the intention of the national Department of Education (DoE) to extend Grade R to all primary schools by 2010, so that it becomes part of the compulsory schooling phase. In 2006, there were 31 836 learners in Grade R in Western Cape public ordinary schools, which represented only 35% of Grade 1 enrolment (DoE, 2008, see literature review, Chapter 3).*

#### **Finding 5**

The analysis of the Educator Questionnaire data showed that the sample teachers reported teaching a total of 108 **Grade R** classes. Teachers of 48 (44%) classes did not appear to have any appropriate qualifications for teaching at the Grade R level. In other words at least 40% of the Grade R classes in the sample schools apparently have teachers without appropriate training or specialisation to teach the reception year.

**RECOMMENDATION 5: WCED needs to take in account the challenge of Grade R teachers without appropriate qualifications and training in departmental planning, so that the pre-school benefits of Grade R are optimised.**

### **THEME 4: Teacher retention and mobility, and employment equity**

*The School Survey asked questions about teacher attrition, recruitments, replacements, shortages, and difficult to fill posts by learning area specialisations and subject.*

#### **Finding 6**

There appear to be issues around the availability, distribution and retention of the most highly qualified and most experienced teachers (the two main factors influencing appointment decisions and by implication teacher demand), particularly in the areas of Mathematics, English, Afrikaans, and the Sciences (Physical Sciences, Natural Sciences and Life Sciences).

Data from the School Survey suggests that primary and high schools are largely using the existing WCED stock to replace teachers who leave or to fill vacant posts. Teachers are leaving one school for another, and, in high schools, data suggest that mobility amongst teachers is higher amongst Mathematics and English and Afrikaans teachers. Such mobility may be contributing to inequity in the distribution of teachers in these subjects. Data from the Educator Questionnaires suggest that the choice of more specialised teachers in core FET subjects is not to teach in higher-poverty schools.

School Survey data suggest mobility within the system but also migration into the private sector as well as early retirement amongst teachers in their 50s. Data from the School Surveys suggest that the highest proportion of WCED- and SGB-paid teachers who left the profession, left to take up positions outside of the teaching profession (attrition). The next highest proportion of WCED-paid teachers left because they were retiring (attrition). This group is followed by teachers (both SGB- and WCED-paid) who left either to take a post at the same level at another WCED school in the same or another district in the Western Cape (turnover or mobility within the system). This information is important, as a high staff turnover can impact on continuity thereby limiting the impact of costly long-term school development plans put in place to improve learner performance. With regard to poor teacher morale, some of the most often cited reasons in the Educator Questionnaire include administrative overload and poor working conditions, as well as a lack of career progression and other promotion opportunities.

**RECOMMENDATION 6: The focus needs to be on retaining the most highly experienced high calibre teachers in the teaching force.**

- **What needs further investigation is where mobility across schools and where attrition from the teaching profession is greatest. For example, is migration from the profession (attrition rates) more pronounced in quintile 5 or quintile 1-4 schools and are teachers in higher poverty schools more inclined to move to other schools (mobility rates)? Are more highly specialised teachers moving from quintile 1-4 schools to quintile 5 schools?**
- **Causes of mobility (for example, of more effective teachers from higher poverty quintile 1-4 schools to historically more affluent quintile 5 schools) and ‘migration’ (for example, early retirement or migration to the private sector) of good quality teachers need to be further investigated and addressed.**
- **Suggested strategies for retaining effective teachers, besides the strengthening of curriculum-based career pathways, include incentives and perks such as study or long leave.**

### **Finding 7**

On the one hand, there is a need to develop strategies to attract, channel and retain more experienced and highly qualified teachers and high calibre new entrants who specialised in high priority subject knowledge areas into the *higher poverty schools*. On the other hand, a factor that was mentioned by principals in the School Survey as an obstacle to *Employment Equity* in quintile 5 schools is difficulty in attracting good quality teachers from different population groups. Some principals indicated that, if support is not in place, teachers who are placed in schools that differ from those to which they are accustomed, may feel alienated and leave teaching altogether.

**RECOMMENDATION 7: The suggestion is that groups of good quality new entrant or experienced effective teachers of core subjects (rather than one or two individuals) be strategically recruited or placed in carefully selected schools (specifically higher poverty schools which have the potential to improve learner performance, and quintile 5 schools that offer supportive environments). Teachers who are appointed in schools that differ from those to which they are accustomed, should be provided with some kind of induction programme (as part of initial teacher education, and when and after they are assigned) to help them to cope with the experience, and potential stress of teaching in a more unfamiliar context.**

### **THEME 5: Strengthening the teacher pool**

*The supply of teachers refers to all those who are currently working as teachers as well as those who are potentially available to be employed in the school system. The latter includes the number of graduating student teachers who make themselves available for employment as teachers, foreign teachers who might be interested to teach in South African schools, and teachers who are not currently working at all or who are working in other sectors of the labour market. The study examined the number of graduating student teachers as well other **potential sources of teacher supply**, such as unemployed people from the education, training and development field.*

### **Finding 8**

The existence of unemployed people qualified within the education field in the Western Cape is evident, and there may even currently be a teacher surplus. For example, in the Western Cape, of the 1 405 new teachers who were appointed to permanent teaching posts between April 2003 and February 2008, only 519 were still in service in 2008, with 886 having left the employment of the WCED (Lewis, 2008). This observation would reflect a finding by Crouch (2005, in Arends,

2007), that the young, less qualified teachers leave the profession sooner than the more qualified and experienced teachers who tend to stay in the teaching profession (in the literature review).

Data from the Student Survey and the report by Yu on the labour market status of the graduates whose study field is education in the Western Cape, also indicate that there may be a significant pool of education student graduates who are not teaching. However, these 'surplus teachers' may not be in the high demand areas where shortages lie, or they might have been trained before the introduction of the revised National Curriculum Statement. Other reasons for such people not being in teaching posts may be poor quality of candidates; poor working conditions; poor student behaviour; perceived low salaries; and the poor image of teaching (Dinham et al, 2008 in the literature review). In the School Survey principals reported that, in their experience, the 'pool' for employment in temporary substitution posts, of good quality teachers with appropriate experience and necessary expertise, is getting smaller.

**RECOMMENDATION 8: WCED needs to consider how best to identify competent people who may be well-qualified to teach subjects in high demand, who are able to cope with the new curriculum needs (who are not currently teaching), and draw them back into the profession especially to fill temporary posts.**

#### **THEME 5 (contd)**

*WCED needs to be mindful of a situation where ineffectual teachers remain in the teaching force whilst better teachers leave or good quality **education graduates** do not enter it.*

#### **Finding 9**

Data from the School Survey suggest that there may be re-distribution of less effective teachers into less empowered environments. The lower than expected number of teachers in the workforce in their 20s evident from Educator Questionnaire data implies that most new appointees are not young, newly qualified teachers; meaning that in 10 years' time there will be a reduction in the number of experienced teachers in the 30-39 age group, and in 20 years' time a similar situation in the 40-49 age group.

The experience of *graduating education students*, according to Student Survey data, suggests that there may be insufficient opportunities for teachers without experience to enter the WCED teaching force and that alleged teaching shortages are not translating into posts for new entrants.

**RECOMMENDATION 9: There is a need to channel ineffectual teachers out of the system to make way for well-qualified, high calibre new entrants into the workforce.**

- **What requires further investigation is the extent to which teachers who are considered to be seriously incompetent or inefficient are being exchanged between schools rather than replaced by more effective teachers.**
- **What also needs to be established is whether new entrants who specialised in high priority subject areas are applying for posts only at specific schools in particular locations.**

### **THEME 5 (contd)**

*Increasing the supply of well-trained isiXhosa speaking **Foundation Phase** teachers for the Western Cape is crucial for the DoE's intention to extend Grade R to all primary schools by 2010, and for it to become part of compulsory schooling. The WCED has allocated 364 additional Foundation Phase teaching posts in high poverty schools in 2008, and there is also a plan to reduce learner/teacher ratios in the Foundation Phase and allocate an additional 150 new Foundation Phase posts in 2009. (WCED, January 2009:3 & 6).*

### **Finding 10**

IPET (the initial professional education of teachers) graduate/final year student data for 2006, 2007 and 2008 provided by the four HEIs showed very low counts of isiXhosa and other African home language student graduates for **Foundation Phase** teaching. The low counts are of great concern given the current policy of home language instruction in the early school years. Morrow ascribes the shortage of Foundation Phase teachers to the social perception that teaching in the senior grades carries more status (Morrow, quoted in Macfarlane, 2007 in the literature review).

**RECOMMENDATION 10: There is a need to increase the supply of well-trained Foundation Phase African language mother-tongue teachers, as well as male teachers. Bursaries should target those areas/groups where present education student enrolment is particularly low. Capable learners who are still at school, and graduates from universities who would like to enter the teaching profession should be actively recruited. Strategies should include fully-costed bursaries, such as Funza Lushaka, with bursary obligations to teach for the number of years funded.**

### **Finding 11**

In response to an open-ended question in the School Survey about teacher supply and demand issues and associated challenges, principals emphasised the need to *attract the best people* into

the profession and to motivate the current stock of more effective teachers to remain in the profession.

**RECOMMENDATION 11: The image and status of the teaching profession needs to be improved and issues that make the profession unattractive to desirable new entrants should be addressed. Strategies include creating an image of teaching as a meaningful and socially valued profession, improved working conditions and protection of teachers' rights and safety; as well as material rewards and perks. The Occupational Specific Dispensation for Educators (OSD, 2008) lays the basis for interventions in this area.**

### **THEME 5 (contd)**

*There are factors that slow down **appointment processes** in schools. Issues around staff establishments, replacement and appointment timeframes and practices need to be addressed.*

### **Finding 12**

According to School Survey data, some *constraints* are that:

- schools are told too late in the year what their staff establishment will be in order to plan and cater for the coming year
- the WCED vacancy list comes out only twice a year
- the high cost of advertising WCED temporary, part-time and contract positions, has to be carried by the school
- applicants from other regions who apply for posts are unavailable for interviews because they have to cover travel and other costs themselves
- the WCED takes too long to confer permanent appointments, resulting in insecurity of tenure because of lengthy provisional appointments. This leads to loss of the better candidates
- The WCED is: 'taking months or years to finalise teachers' early retirement on grounds of health or stress, whilst in meanwhile, the teacher in question is absent' (quote).

**RECOMMENDATION 12: There is a need for more flexible, accessible and visible electronic information dissemination both for schools that require teachers, and for the available teaching stock. There should be a publicly accessible database of unemployed teachers, and other people trained and willing to teach, (including in temporary posts), giving their qualifications, specialisations and experience. The current system could be made more flexible in terms of dealing with posts that fall vacant between publication of lists of vacant posts through the creation of more easily accessible websites.**

## **THEME 6: Impact of language and demographic shifts**

*There are difficulties arising in some schools around the issue of class size and learner/teacher ratios because there are children with different home languages and a need for **parallel medium classes**. An important factor for the Western Cape is the inflow of isiXhosa families from the Eastern Cape (DoE, 2006 in the literature review).*

### **Finding 13**

Educator Questionnaire data indicate that, in the majority of cases, Foundation Phase classes in the sample are being taught by teachers who speak the language of instruction used as a home language. However, in Afrikaans/English dual medium Foundation Phase classes teachers more commonly speak Afrikaans than English at home. In the School Survey principals reported that this pattern has implications particularly for children who are mother-tongue isiXhosa attending predominantly Afrikaans medium schools but where English is offered as a medium of instruction.

Principals also indicated that challenges around the issue of learner/teacher ratios are exacerbated by the fact that school principals are counted as part of the teaching establishment when it is impossible for principals to do justice to administrative and management duties and teach.

**RECOMMENDATION 13: The allocation of staff establishments need to take into consideration the issue of classes with children with different home languages and emerging parallel medium classes, particularly in Afrikaans medium schools, to meet the needs of isiXhosa home language learners; and the impact parallel medium classes are having on learner/teacher ratios.**

### **Finding 14**

In the School Survey principals expressed the need for **remedial or ELSEN** (learners with special education needs) **teachers** and assistant teachers; for example, to accommodate ELSEN learners, and learners with insufficient levels of proficiency in the language of learning and teaching (LOLT). Researchers noted (from the Educator Questionnaires) a trend of appointing teachers in SGB posts to cater for ‘remedial/special needs’ classes.

**RECOMMENDATION 14: Underlying reasons for the demand for ELSEN and remedial teachers evident in public ordinary schools need to be investigated. What should be established is whether the demand exists because learners have genuine learning disorders that are best addressed through specialised remedial teaching; or whether the demand is due to learner under-preparedness as a result of insufficient levels of proficiency in the language of learning and teaching and/or because learners have not had the opportunities to learn what is required in earlier grades. Is the need simply for extra lessons to catch-up, or is there a genuine need for more specialised remedial teachers?**

### **9.1.2 Recommendations for WCED and Higher Education Institutions**

The recommendation is for closer cooperation, collaboration and co-ordination between WCED and Higher Education Institutions around six issues:

1. planning IPET student intake with regard to learning area/subject specialisation, school phase, and home/teaching language
2. 'standardisation' of qualification certificates and identifying a common set of information that should appear on certificates so that certificates show the specific fields (school level and subject specialisations) in which graduates are qualified
3. determining the practicality and cost effectiveness of upgrading REQV 13 teachers who are in the 50 plus group
4. evaluating the extent to which the costly exercise of up-skilling in-service teachers actually impacts on learner performance
5. developing a framework for ongoing professional development in the context of new requirements and Professional Development (PD) points for teachers and guidance in ensuring an appropriate match between the capacity and potential of individual teachers and particular interventions
6. focusing professional teacher development on building curriculum subject knowledge in specialisations that teachers already have (for greater depth) and the development of specialisations in cognate areas.

### **9.1.3 Recommendations for Higher Education Institutions**

The six recommendations for Higher Education Institutions are to:

1. urgently investigate reasons for the low count of isiXhosa home language education graduates, especially in the Foundation Phase and increase the supply of well-trained Grade R and Foundation Phase teachers
2. investigate reasons for the overall low proportion of African education graduates. Student Survey data on 2008 IPET final year students suggest that about 14% (90) of the 656

students from the four HEIs classified themselves as ‘African’. The low percentage of African education graduates is an obstacle to Employment Equity and the diversity of the teaching force in the Western Cape.

3. ensure compatibility of information on students, and consider criteria and ways in which databases on students can be standardised, to facilitate compiling ongoing comparative data across institutions
4. establish mechanisms for routine tracking of student teachers once they have graduated, to establish if new student-graduates genuinely experience difficulties in finding teaching posts in the Western Cape. If real difficulties emerge, HEIs need to identify that reported teacher shortages do not appear to be translating into jobs for their newly qualified teachers.
5. administer an exit questionnaire to all graduating IPET students every year in future, and share the outcomes amongst themselves and with the WCED. In future Student Surveys it would be useful to establish whether students are applying for posts outside of the larger cities in the Province, or outside of Cape Town. It would also be useful to distinguish between whether graduating students who have obtained posts in WCED schools, have been appointed to SGB posts or WCED posts; and, if they intend teaching overseas, if this is a short-term plan and they expect to return, or whether this move is emigration.
6. identify whether HEIs have the physical capacity and human resources to cope with and cater for anticipated increased enrolments of upgrading REQV 13 teachers, and whether they are in the position to offer the necessary subject specific teacher upgrading qualifications.

## **9.2 Recommendations regarding systems**

The following recommendations serve as a framework for strengthening systems within:

- WCED (6.2.1)
- Cape Higher Education Consortium, comprising the Cape Peninsula University of Technology, the University of Cape Town, the University of the Western Cape, and the University of Stellenbosch (6.2.2).

### **9.2.1. Recommendations for the Western Cape Education Department**

The three recommendations for the WCED relating to systems are that:

1. overall communication between WCED operations needs to improve in order to ensure that projects such as this study are linked to, co-ordinated and aligned with other actions and activities in the system. Our experience of the internal complexities of the education system, interconnections and interdependencies, and pre-existing timelines within the

2. educator supply and demand projects such as this should be embedded in the overall functioning of human capital management systems and directly linked to the WCED's overall strategy for school improvement and improvement in learner performance. The objective of improved learner performance cannot be achieved without good quality teachers with appropriate expertise in the classrooms.
3. the WCED needs to develop and maintain accurate and up-to-date quality electronic information human resource systems and databases. It is important that WCED captures correct, standardised and comprehensive electronic qualifications data, such as subject and school level specialisations, on all educators when they first enter the system. Later system changes and curriculum changes require both input and keeping track of changes in qualifications/status.

### **9.2.2 Recommendations for the Cape Higher Education Consortium**

A recommendation for the CHEC regarding systems is that:

- the CHEC Board needs to consider developing the capacity of its member institutions to undertake future large scale education studies and surveys.

### **9.3 Conclusion**

*A concluding recommendation is that the work started by this teacher supply and demand study be continued through follow-up investigations and further research.* For example, investigating what motivates good teachers to remain at the same school, especially higher-poverty schools; the experiences of new entrants into the teaching profession; and researching quality issues such as the relationship between learner performance, and teachers' qualifications and classroom practice.

The literature review in the report provides some of the models used to measure educator supply and demand. However, further research and discussion is required to *identify an appropriate supply and demand model that is realistic and useful in the South African context.* Once a clear national model is identified, provincial education department/s could work towards ensuring that the necessary data sets are readily available; then, using the accepted model as a basis, educator supply and demand can in the future be reliably and systematically modelled at both provincial and national levels. The model should be used in conjunction with policies that make explicit assumptions about interventions and likely outcomes.



## REFERENCES

- Arends F (2007). The Employment Status of Educators. Research and Development Programme on Teacher Education in South Africa. HSRC. Conference paper presented at the 'Teacher Development and Institutional Change in an evolving Education Context' conference, held at the Kopanong Conference Centre, 28 and 29 May 2007.
- Arnott A and Chabane S (1995). Teacher Demand, Supply, Utilisation and Costs. Report for the National Teacher Education Audit. Johannesburg: EduSource 95/03.
- Bertram C, Appleton S, Muthukrishna N and Wedekind V (2006). The Career Plans of Newly Qualified South African Teachers. Sabinet Online Vol 26 Issue 1.
- Boe E and Gilford D (eds). (1992). Teacher supply and demand and quality: Policy issues, models and databases. Conference proceedings. NRF. Washington: National Academic Press.
- Bot M (2003). Macro Indicators in Education, 1998 to 2003. In Kgobe M, Transformation of the South African Schooling System. A report from the fourth year of the Education 2000 plus, a longitudinal study to monitor education policy implementation and change. Education 2000 Plus. Johannesburg: CEPD.
- Carnoy M and Chisholm L et al (2008). Towards Understanding Student Academic Performance in South Africa: A Pilot Study of Grade 6 Mathematics Lessons in South Africa. Report prepared for the Spencer Foundation. Pretoria: HSRC.
- Committee on Teacher Education Policy (COTEP) (1996). *Norms and Standards for Teacher Education*. February, 1996.
- Crouch L and Mabogoane T (2001). 'No magic bullets, just tracer bullets: The role of learning resources, social advantage, and education management in improving the performance of South African schools'. *Social Dynamics*, 27(1) 60-78.
- Crouch L and Perry H (2003). Educators. In: 2003 HRD Review. Pretoria: HSRC.
- Darling-Hammond L (1999). Teacher Quality and Student Achievement: A Review of State Policy Evidence. Center for the Study of Teaching and Policy, A National Research Consortium. University of Washington.
- Department of Education and Culture, House of Assembly (1993). *Criteria for the Evaluation of South African Qualifications for Employment in Education*.
- Department of Education (2000a). *Norms and Standards for Educators*. Government Gazette, Vol.415 No.20844. Pretoria: Government Printer.
- Department of Education (2000b). *Criteria for the Recognition and Evaluation of Qualifications for Employment in Education*. Government Gazette, Vol.423 No.21565. Pretoria: Government Printer.
- Department of Education (2002). *Revised National Curriculum Statement Grades R-9 (Schools): Overview*. Government Gazette, Vol.443 No.23406. Pretoria: Government Printer.

- Department of Education (2003). *National Curriculum Statement Grades 10-12 (General): Overview*. Pretoria.
- Department of Education (2005a). *Report of the Ministerial Committee of Teacher Education*. Pretoria.
- Department of Education (2005b). *Education Statistics in South Africa at a Glance in 2004*. Pretoria.
- Department of Education (2006). *The National Policy Framework for Teacher Education and Development In South Africa. 'More teachers; Better teachers'*. Pretoria.
- Department of Education (2008). *Education Statistics in South Africa 2006*. Pretoria.
- Dinham S, Ingvarson L and Kleinhenz E (April 2008). Investing in Teacher Quality: Doing what matters most. Paper prepared for: The Business Council of Australia (2008). Teaching Talent: The Best Teachers for Australia's Classrooms.
- EduSource Data News, 41, 44 and 50. Johannesburg: The Education Foundation.
- Howie S, Venter E, van Staden S, Zimmerman L, Long, C, Scherman, V and Archer E (2007). PIRLS 2006 – Progress in International Reading Literacy Study 2006: Summary report (South African Children's reading literacy achievement). Pretoria: University of Pretoria.
- King Rice J (2003). Teacher Quality. Understanding the Effectiveness of Teacher Attributes. Economic Policy Institute. Available: [http://www.epi.org/content.cfm/books\\_teacher\\_quality\\_execsum\\_intro](http://www.epi.org/content.cfm/books_teacher_quality_execsum_intro)
- Lewis F (2008). Re-thinking teacher education and development – Can other models provide a solution for improving teacher training programmes? Western Cape Education Department: Human Capital Development Strategy.
- Macfarlane D (2007). 'Ups and downs of teacher bursaries', Mail & Guardian 22/9/07.
- Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) (2003). Demand and supply of primary and secondary school teachers in Australia. Available: [http://www.curriculum.edu.au/verve/\\_resources/demand.pdf](http://www.curriculum.edu.au/verve/_resources/demand.pdf)
- Mobile Task Team (2005). Educator Attrition and Mortality in South Africa. A Study into Gross Educator Attrition Rates and Trends, including Analysis of the Causes of these by Age and Gender, in the Public Schools System in South Africa 1997 – 2004 for the South African ELRC. Revision 10: 20 February.
- Morrow W (2007). An unofficial report on teacher supply for the schooling system in South Africa. (Quoted in Lewis F (2008) Re-thinking teacher education and development – Can other models provide a solution for improving teacher training programmes? Western Cape Education Department: Human Capital Development Strategy).
- Paterson A and F Arends (eds). (2008). *Who are we missing? Teacher graduate production in South Africa, 1995-2006*. Pretoria: HSRC Press.
- Peltzer K et al (undated Media Release of final report). Educator Supply and Demand in South African Public Schools. Commissioned by the ELRC. Pretoria: HSRC.

- SAIDE (2008). Report on Research into Teacher Upgrading. For the Chief Directorate: Teacher Education and Development, Department of Education.
- Santiago P (2002). *Teacher Demand and Supply: Improving teaching quality and addressing teacher shortages*. A literature review and a conceptual framework for future work. OECD Education Working Paper No.1. Paris: OECD.
- Shindler J (2008). Public Schooling. In: Kraak A and Press K (eds), *Human Resources Development Review 2008: Education, Employment and Skills*. Cape Town: HSRC.
- Soudien C (2007). The 'A' factor: Coming to terms with the question of legacy in South African education. *International Journal of Educational Development*, 27:182-193.
- Statistics South Africa: *Documented migration*. Pretoria: Statistics South Africa. Available: <http://www.statssa.gov.za/publications/findpublication.asp>
- Taylor N and Vinjevold P (eds). (1999). *Getting Learning Right. Report of the President's Education Initiative Research Project*. Johannesburg: Joint Education Trust.
- Taylor N, Fleisch B and Shindler J (2008). Changes in Education since 1994. This paper forms part of the Fifteen Year Review commissioned by the Office of the Presidency.
- UNESCO Institute for Statistics website. Available: [http://www.uis.unesco.org/ev.php?ID=2867\\_201&ID2=DO\\_TOPIC](http://www.uis.unesco.org/ev.php?ID=2867_201&ID2=DO_TOPIC)
- Van der Berg S (2003). 'Education: The Crisis in Schooling'. In: *Taking Power in the Economy: Gains and Directions*. Economic Transformation Audit, 2004. Cape Town: Institute for Justice and Reconciliation.
- Van der Berg S (2005). The schooling solution: Primary schools' performance is the key. In Brown S (ed), *Conflict and Governance*. Cape Town: Institute for Justice and Reconciliation.
- Van der Berg S and Burger RP (2007). Teacher pay in South Africa. Unpublished report. University of Stellenbosch.
- Western Cape Education Department (2009). *Back to School* (supplement). January 2009.
- World Bank Database website. Available: <http://www.worldbank.org/>
- Yu D (2008). A profile of the characteristics of working-age population from the field of education and employment in teaching professions. Department of Economics, University of Stellenbosch.



## **APPENDIX A: Details of investigations and processes: Situational analysis and workplan**

The WCED had informed CHEC that specific WCED data on schools and teachers could be made available for the research via prepared reports on EduInfor Search (EIS) BI tool. The ESDA team first had to provide the Department with a list of information required<sup>1</sup>. However, if the ESDA needed data not already available in report form, then WCED could run a query to supply the data required. Ideally the ESDA data needs would be presented in a table with a column in which the WCED's Education Management Information System (EMIS) could indicate which information could be supplied by EMIS, and which had to be obtained from other sources.

The ESDA project researcher asked the WCED for a collective response to an initial list of information, key variables and indicators that the researcher thought would be necessary<sup>2</sup>. This list was to establish:

- which elements/data/records already exist at the WCED
- their source/s, for example the Central Education Management Information System (CEMIS)/Personnel & Salary System (PERSAL), etc.
- their availability (i.e. whether information can definitely be provided to the researchers)
- their currency (Is the data up-to-date?)
- their status (whether fully verified/reliable)
- their format (whether captured electronically or not).

A preliminary Excel spreadsheet was prepared for this purpose and structured as lists of the variables covering teacher, school and WCED system-level information. The WCED was also requested to augment the list by naming any variables, and their corresponding details, that might have been overlooked, and which the WCED considered necessary for the research.

### **Existing WCED data**

As indicated in Chapter 2, the outcome of this process was that the research team established:

- The WCED Personnel Department has its own system, PERSAL, for capturing information on teacher qualifications in order to establish salary scales – Relative Education Qualification Value (REQV) levels. Although PERSAL is able to provide some information about current educators, PERSAL information on teacher subject

---

<sup>1</sup> EIS reports are general reports on frequently asked for data; if there is a specific recurrent need for certain data then EIS reports are created to prevent many requests for the same reports. Users can then access the information themselves.

<sup>2</sup> As part of the situational analysis process, a draft list of key variables and indicators for which Higher Education Institutions' HEMIS data was required was circulated to the ESDA Oversight Committee members for their response to establish which HEI student enrolment and graduate data was actually available.

specialisation/s is incomplete and qualification data is not always up-to-date.<sup>3</sup> The apparent reason for this, which is a constraint in terms of the ESDA requirements, is that from the time when higher qualifications were no longer linked to salaries records on new qualifications obtained were not always up-dated. Therefore the data does not always provide information on *all* certificates/qualifications obtained by a specific teacher.

- The CEMIS (Central Education Management Information System) or SOBIS (Sentrale Onderwys Bestuursinligtingstelsel) is the operational central database in which schools capture information on learners. In relation to data on *learner subject enrolments*, CEMIS has captured data on Grades 10-12 learner subject enrolments per school, which includes independent schools. This data is not verified and is ‘for evaluation purposes only’ rather than for use as a planning tool. WCED has a system for tracking individual learner’s school registration and any transfers to other schools. This system records each learner’s current and past whereabouts (which schools/districts), why they left a school, etc. However, this information is confidential and not accessible externally. It is only available to school circuit managers/administrators and can only be accessed through intranet in WCED offices. Educator data is of secondary importance within CEMIS.
- The WCED’s EMIS had captured data on teachers at public ordinary schools only for 2005 on an Access database. This data includes teacher qualifications and SGB posts<sup>4</sup>. This captured data had neither been verified nor cleaned. Nor have supporting documents such as copies of qualifications/certificates been collected to validate the information. WCED made this database available for the ESDA study with a clear understanding of the conditions of its use and emphasising that the data has not been updated since 2005.
- The WCED Curriculum Department has a centralised electronic database recording teacher participation in in-service preparation for the ‘new’ National Curriculum Statement (NCS) for primary school teachers. Information on non-formal INSET (in-service education and training) should be available via WCED for all primary teachers if the service providers are accredited by the WCED. INSET attendance by high school teachers has not been captured electronically but manual registers are kept by each district. Obtaining the latter information for the purposes of the ESDA would not be feasible.
- The South African Council of Educators (SACE) has been tasked with developing a structured Continuing Professional Teacher Development (CPDE) system and is in the process of developing a system for keeping records of educators’ Professional Development (PD) points per teacher, but this system is not yet in place.

---

<sup>3</sup> Appendix B provides a list of fields currently available on PERSAL as supplied by PERSAL.

<sup>4</sup> In 2005 a service provider had delivered data collection forms to schools and which teachers were asked to complete. The provider had captured the information into a database.

A detailed examination of the WCED data that was made available for the ESDA showed the current state of WCED data on teacher qualifications and, in particular, their subject specialisation/s to be inadequate for the purposes of the ESDA research. A major constraint in relation to both the EMIS and the PERSAL electronic data is that captured teacher qualification and subject specialisation data are not standardised. When this information was captured, the non-standard acronyms, Afrikaans and English versions, etc. supplied by teachers were used by the data capturers. Teachers provide their teaching specialisations in unstandardised free-text form, and many educators had simply listed 'Education'; 'Pedagogics'; 'History of Education'; 'Philosophy of Education'; 'Sociology of Education'; 'Didactics', 'School Management', etc. as their subjects instead of curriculum-related specialisations. Essentially existing WCED data on this crucial dimension is not as reliable or 'usable' by a project such as the ESDA. SACE information on teacher qualifications is reportedly also incomplete and not always up to date. The available data is not necessarily correct, is incomplete and is not coded in a standardised format that is suitable for *research* purposes.

The ESDA team concluded from the WCED data sources that were made available, and from the limitations of this data, that the research study would need to involve considerable original data collection, and in particular, collection of information on WCED educator qualifications and subject specialisations.

### **Workplan**

A provisional workplan for the research was drawn up at the beginning of May 2008 based on the above conclusions and on the approach outlined in the research brief (which had an October deadline for completion). Essentially the intention was to try to conduct a census of the whole teacher population before 27 June 2008, that is, the end of the second school term. This plan was dependent on various factors, one of which was that conducting a census of the whole teacher population within the timeframe available would only be possible if online electronic questionnaires could be used to collect data on teachers and schools. Conducting a once-off online census independently of the WCED online systems would entail many logistical problems. Rather, the process needed to be carried out with the full support of WCED structures and the data collection process linked to ongoing WCED information gathering. Ideally the ESDA data collection processes needed to be interlinked with WCED systems so that the information collected could be integrated into existing WCED databases.

Clearly the ESDA team needed to establish as soon as possible the possibility of conducting an online electronic survey linked to existing WCED systems and the cost implications of this electronic route. An online audit would require that the WCED service provider advise and assist

regarding the design, specifically with ensuring conformity with WCED systems and standards, for example, for the use of drop-down menus. WCED online systems would also be required for capturing and storing completed online entries. WCED assistance would be required with district, school and teacher-level compliance, and with identifying schools unlikely to have the capacity for capturing online information directly at school level so that paper-based versions could be organised or printed out at such schools. WCED advice would be required regarding covering photocopying or printing costs per school, etc.

A further advantage of conducting an online survey using WCED systems, was that existing reliable WCED data could be used to pre-populate answers to ‘identifying’ questions such as schools’ EMIS numbers, and teachers’ PERSAL and ID numbers. This pre-population would greatly facilitate ‘matching’ with any other existing WCED data, for example learner performance data, and with data collected through the ESDA.

At the ESDA Oversight Committee meeting on **23 May 2008**, the ESDA project researcher reported that the process of preparing a teacher census form and a school survey form that could be adapted for online electronic data collection was underway. However, the ESDA team needed to ensure that this initiative had the full support of the WCED. Furthermore, interactions between the ESDA team and WCED had indicated that there were other initiatives within the Department, and that the national Department of Education (DoE) planned to ask schools and educators similar questions.

On **22 April 2008** at a meeting at WCED with the Chief Director: Curriculum Development, a representative from the Directorate: KM, IMS & ICT and the then Project Leader: Human Capital Development Strategy in Chief Directorate: Education Planning, the ESDA project researcher had established that a CEMIS questionnaire and an online Human Capital instrument that aimed to collect information on educators were in the pipeline. The ESDA researcher had been shown drafts of the CEMIS and the WCED’s Human Capital-Leave Management System (HC-LMS) documents. The focus of the Human Capital form is on leave and salary issues, and the qualifications section is just one module of a much larger system that includes all public servants. Nevertheless, an examination of the documents showed considerable overlap between the fields used in the HC-LMS document data dictionary, the data that the CEMIS educator form intended to collect, and data the ESDA would need. Both WCED instruments are designed to collect data on educator qualifications and subject specialisations.

The ESDA researcher also established that the DoE was busy preparing for a nationwide survey of educator qualifications and subjects. This survey was to be conducted by the Human Sciences

Research Council (HSRC). It seemed that developing an online questionnaire that met needs similar to those of all these other initiatives required exploration.

### **Interactions around similar initiatives within the WCED**

Some of the initial discussions with WCED officials:

- While it was intimated that the WCED's HC-LMS qualifications module would be 'signed off' (i.e. approved in principle) by the end of May 2008, it was stressed that the qualifications data would not be available in time to fit the timeframe of the ESDA. The Human Capital priority for 2008 was getting a database for leave sorted out. The Leave Management System was still in the development stage – with the first phase, which entailed displaying some leave information to schools, still in the process of becoming operational. They were not yet ready to take on the teacher qualification issue and, although the WCED was in the process of developing a system which would collect the kind of data ESDA needed, the system was unlikely to be ready to collect data in time for the ESDA timeframe.
- It seemed that both the Human Capital and CEMIS initiatives were still in the process of becoming operational and were unlikely to have data in time for the ESDA timeframe. Pre-existing WCED timeframes made timely delivery of an online audit using WCED systems and online data collection for the ESDA's six-month contract timeframe unlikely. Nonetheless, given the amount of work that had already gone into the design of the CEMIS (paper-based) form and HC-LMS online system and the overlaps, the suggestion was that the ESDA team meet the other groups to compare needs and questions and seek synergies so that ESDA data sets could at least be linked to ongoing WCED information gathering.

On **27 May 2008** the Chief Director: Curriculum Development arranged for the ESDA team to meet WCED officials from the Directorates: Research Services; Human Capital Planning; and KM, IMS & ICT. It was emphasised that the support of the different WCED directorates was essential for the project. The ESDA team explained that, after assessing existing EMIS and PERSAL data on teachers' qualifications, the data were found to be inadequate for the ESDA purposes. Essential for the ESDA study was information on teachers' subject level expertise. To collect data on the whole teacher population, the ESDA would need to follow an electronic online data collection route. This online route would require the support of WCED structures and co-operation of district offices.

It also emerged that:

- The paper-based CEMIS questionnaire that had been developed could be adapted to go the electronic online route. Educator information (including qualification and subject information) is supposed to be collected through an annual survey for the DoE by all provinces; in the Western Cape the survey was last conducted in 1999, and the data needed to be collected before October 2008.
- The Human Capital Directorate was currently busy with the electronic leave management system. The system consisted of closed data sets and, as pointed out previously, there was considerable overlap with the information ESDA needed. It was confirmed that the HC online system and database being developed was flexible enough to add ESDA questions, but that the biggest constraint was the different timeframes for the two projects. Although there were practical difficulties, the ESDA team conceded that it would be possible to move the ESDA data collection to the beginning of the third term, if this delay was absolutely necessary. All parties agreed that schools and teachers would not appreciate having to provide this data more than once in 2008.

As part of ongoing communications with the WCED, drafts of the ESDA Educator Questionnaire and the School Survey were circulated via email to the relevant WCED staff. In this way it was hoped to provide an indication of the kind of data that would be needed for the ESDA. It was also hoped that this process would be useful for establishing where reliable WCED data already existed, and for considering the comprehensiveness of the whole supply and demand data set as well as identifying possible gaps in information. It was hoped that the instruments developed for the ESDA would be useful for enhancing or adding to the systems that the WCED was busy developing, and that the ESDA could contribute towards providing a base (of data) for the HC-LMS survey to build on when it went ahead.

It was explained that an intention of the leave management form is to collect data on teacher qualifications for the personnel database and to verify this information over time by checking the reported data against teachers' files; and if these qualifications/certificates are not available in teachers' files, possibly to go back to the certifying institutions, if these bodies still exist. The Human Capital educator qualifications module therefore asks for the actual names of qualifications as well as the names of the training/higher education institutions where teachers qualified. It seemed that, where the ESDA could contribute to this 'Focus Area Personal Information' module, was around formulating and testing drop-down menus of names of Higher

Education Institutions (HEIs) where teachers may have studied, qualifications, and subject specialisations in line with current curriculum requirements.<sup>5</sup>

It was subsequently suggested that the next step in taking an online audit idea forward could be to get the CEMIS questionnaire ready for the WCED online service provider, it had been determined that existing PERSAL data could be used to pre-populate the CEMIS questionnaire. This could then be a facility via which existing information is confirmed (for example, by the users) as opposed to collecting ‘fresh’ data<sup>6</sup>.

On **4 June 2008** the ESDA team met WCED staff involved with the HC-LMS online system and from WCED’s service provider for online questionnaires including the ICT Project Manager: Chief Directorate e-Innovation Department of the Premier Provincial Government of the Western Cape *and* the Applications Development Manager Centre for e-Innovation: Cluster: Education, Cultural Affairs and Sport Provincial Government of the Western Cape, to discuss the possibilities and benefits of integrating the processes of CEMIS and ESDA. At this meeting it was confirmed that all schools, except for a handful, now have computers and were ‘connected’ for capturing CEMIS data. However, it was also established that that the development of an online teacher qualifications questionnaire on CEMIS would no longer be taking place as a separate initiative (see paragraph above). The Human Capital Directorate would now be responsible for the integration of the various staff qualifications initiatives. The possibility of formally incorporating the ESDA survey into the Human Capital online module on qualifications by incorporating essential additional questions was again raised. Again the main constraint identified was the ESDA timeframe. The Human Capital system that WCED was working on could not be ready by end July/beginning August. Pressure on the developers was coming from various quarters and all with different priorities.

The timing was the problem. The ESDA project researcher emphasised that CHEC’s six month contract timeframe needed to be met. If currently available WCED online/electronic means could not be used within this timeframe, then ESDA would have to pursue the idea of a *paper-based questionnaire*. By implication, the ESDA team would have to consider the possibility of collecting data on a very carefully selected *sample* rather than the whole population. However, this would mean that the ESDA would not be embedded in the WCED management information systems.

---

<sup>5</sup> The ESDA Educator Questionnaire that was being developed at that stage, took all of the above into account in its design. The ESDA team consulted with, and drew on the knowledge and experience of, Associate Professor Rob Siebörger at UCT with regard to qualifications and method subjects.

<sup>6</sup> A limitation here is that the existing data is not standardised.

At the end of the meeting the latest versions of the ESDA draft Educator Questionnaires and the Human Capital online User Requirement Specifications (URS) for the focus area: Personal Information Data (PID) Bank and its data dictionary were exchanged so that both parties could compare them. New fields had been added to the Human Capital educator qualifications module, specifically 'Language proficiency and endorsements', 'Professional body registration', 'Extra mural activities', and 'Special awards'. Information on independent schools was also to be collected. The Human Capital leave form would also collect information on (non-formal) INSET.

The process of comparing the ESDA teacher census requirements and the current Human Capital URS PID Bank established a definite synergy between the two instruments. About five data sets of value in the ESDA Educator Questionnaire were of value to the WCED process and would eventually be integrated into the current development phase. These fields were: 'Post level per employee'; 'Nationality of employee'; 'Subject level of training'; 'Current qualification information'. The ESDA team similarly found considerable synergy between the two data set requirements. However, the URS document received from the WCED was more difficult for the ESDA team as 'outsiders' to understand than the ESDA questionnaire because the document was written for programmers. The ESDA team therefore requested a meeting to address questions of clarification. An important aspect that had to be established was whether the Human Capital instrument covered the subjects and levels that teachers currently teach in its 'experience' section. At the meeting the ESDA team could also show updated work with regard to subject specialisations, and establish whether there were any further contributions the ESDA could make particularly in relation to drop-down menus.<sup>7</sup>

The situation at this point was that, although WCED staff had confirmed that incorporation of additional EDSA questions into the HC-LMS PID Bank module was possible without any major technical or logistical implications, there was still lack of certainty around the possibility of fast tracking the module to fit in with the stipulated timeframe for the ESDA. As considerable time had been spent clarifying the status of both CEMIS and the HC-LMS processes and exploring avenues for integrating the ESDA work with WCED initiatives, the Chief Executive Officer (CEO) of CHEC, the Convenor of the Oversight Committee, the ESDA project researcher and others met to discuss the way forward on 6 June.

The outcome of this meeting was that CHEC's CEO wrote a letter dated 9 June to the Superintendent General (SG) of WCED, copied to the DDG responsible for Corporate Affairs and Human Resource Development (and for getting the database for leave sorted out) and the

---

<sup>7</sup> In developing their questionnaire, WCED had decided to use only field names. This was in line with other subsystems of the bigger HC-LMS portal. The Human Capital form would also only be made available in English.

Directorate: WCED Planning, pointing out the synergy between the CHEC brief and the online HC-LMS. The letter proposed that (PID) Bank, with incorporated questions from CHEC, be treated as a pilot and released for completion at the start of the new school term in July 2008. CHEC stressed that a firm commitment would be needed on timeframes for this pilot. If this commitment was not possible, as no online access to schools was possible outside of the Human Capital project, the ESDA would have to go the route of a paper-based questionnaire and survey. Due to time, logistical and financial constraints, this would have to focus on a carefully selected sample and would not be a comprehensive audit, as indicated in the original brief.

On **17 June 2008** the ESDA team met the ICT Project Manager Chief Directorate e-Innovation and the Applications Development Manager Centre for e-Innovation to discuss WCED's HC-LMS educator qualifications module. The ICT Project Manager demonstrated the current employee records, using a laptop to outline where the qualifications module would be inserted into the system. The ESDA did not need the same level of detailed information on all teaching/work experience, its focus was rather on the current subjects and levels taught and appropriateness of teachers' qualifications for their current posts. However, if the ESDA was able to integrate its data collection process into the Human Capital online system, the focus would be on 'counting' the workforce and not on gathering information on school timetables. The Human Capital leave form is not designed specifically to capture 'out of field' teaching assignments or data on 'difficult to fill' vacancies at schools which the ESDA school level instrument is designed to capture. The ICT Project Manager noted that a constraint for the ESDA data collection was that schools do not currently all use the same Timetable Administration package so data on the school timetable/subject choices available for learners would be best collected from each school directly<sup>8</sup>.

In response to the 9 June letter, CHEC was invited to the WCED Exco meeting on **18 June 2008** to formally present its request. The CEO and the ESDA project researcher attended. At the meeting the CEO outlined various options and their implications, and the need for certainty around timeframes. The ESDA project researcher demonstrated some of the complexities of the data to be collected, and the need to secure support for the roll-out from WCED officials, districts, etc.

Conducting an online survey independently of the WCED online systems entailed too many logistical problems. Because of the complexity of the educator-level data that the ESDA had to collect, a paper-based Educator Questionnaire would definitely require mediation by fieldworkers

---

<sup>8</sup> The WCED's longer term plan, for two years' time, is to have everything on a common system (SA SAMS) for all schools.

for teachers. Thus a paper-based census of the whole population would be too cumbersome and costly. A carefully selected sample would go some way to answering the questions required by the brief. However, this limited focus would mean that an opportunity to create a nuanced, ongoing management information system through the ESDA process would be lost.

Key questions around finalising the ESDA workplan at this stage that needed to be answered were:

- Did the WCED expect as a by-product of the study a complete ‘live’ database of teachers and their qualifications?
- Was this database more important than simply sampling to answer the questions the research brief wanted answered?

If the study could *not* conduct a census of the whole teaching force, the alternative would be to answer questions about supply and demand through the use of paper-based Educator Questionnaires, extrapolating data from a sample with the possibility of future add-ons through WCED budget provision for subsequent years. Any ‘temporary’ set of findings from the sample could then be reviewed at a later date once data collection from the entire population was possible and had been completed. If paper-based, i.e. hard copies of questionnaire and survey instruments were used for the ESDA, then the logistics of collection, return and storage, and manual data capture had to be worked out and costed (for example, the cost of using UCT’s Information Computer Technology (ICT) in-house data capture service). However, the limitations of such a ‘snapshot’ sample route ought to be made clear at the outset.

What became evident from the discussions that followed is the complexity of the WCED environment. The meeting confirmed that the ESDA would not be able to make use of the WCED's Human Capital leave online system in 2008. Pre-existing contracts and timeframes, to deliver different aspects of the WCED’s responsibilities, made timeous delivery of an online audit using WCED systems and online data collection before October 2008 impossible.

In the absence of further information after the WCED Exco meeting, CHEC responded adaptively. After assessing the situation, it was confirmed that a paper-based Educator Questionnaire would be directly administered to a sample of the schools by fieldworkers, and that the findings would have to be extrapolated from this sample to the population of schools. If possible, data collected by the sample could then be supplemented or checked for triangulation with existing PERSAL and CEMIS data. The sample would be selected so that findings could be extrapolated for an urban and a rural district. Collection of data on the qualifications of the entire population of schools would thus have to follow (via the HC- LMS) as a subsequent activity. The

set of ‘temporary’ findings from the ESDA sample survey in 2008 would need to be reviewed after complete data collection on the entire population had been achieved through the WCED system in 2009.

### **Interactions with the DoE initiative**

Early in May 2008 the Dean of the Faculty of Education at CPUT had reported that the DoE was planning a pilot survey of educator qualifications and subjects in some provinces in 2008; the purpose of the survey was to be able to plan effectively for teacher upgrading.

Information provided at the WCED Exco meeting on 18 June 2008 was that schools in the Western Cape would not form part of the sample for the national pilot, i.e. the sample would be drawn from provinces other than Western Cape.

According to Tessa Welch at the South African Institute for Distance Education (SAIDE) who was responsible for developing the teacher qualification questionnaire for the DoE, there are two stages, the 2008 pilot and the survey in 2009. If the funding is secured for the second stage, the HSRC would be surveying schools in all nine provinces including the Western Cape.

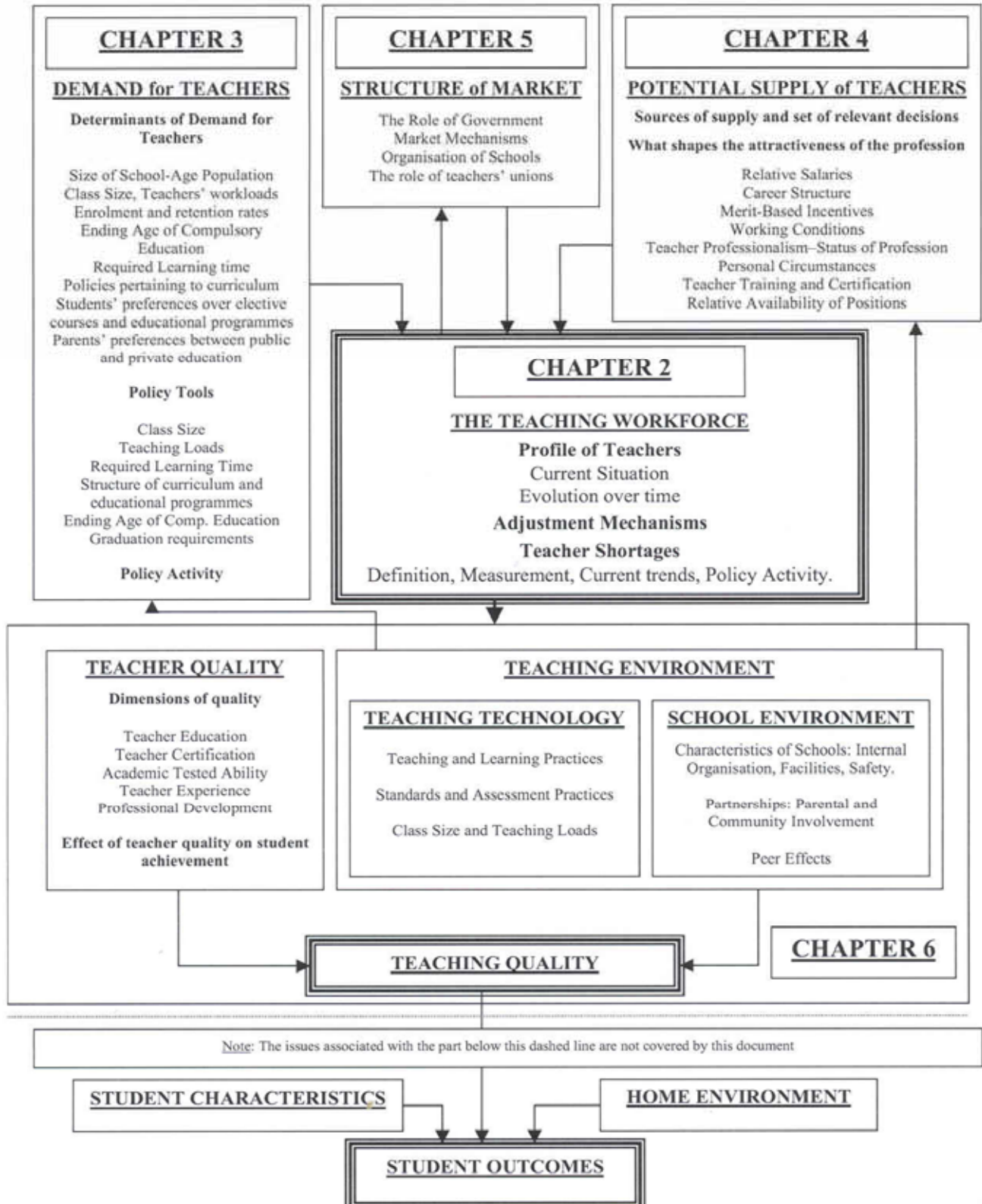
Nevertheless the ESDA research team felt that it was important that the ESDA process aligned itself with all other initiatives. The ESDA project researcher therefore contacted people working on the DoE survey instrument and suggested that, if the DoE survey took place in schools in the Western Cape, the schools sampled for the ESDA should not be used so that the same data was not collected at the same schools in the Province.

**APPENDIX B: Fields currently available on PERSAL as supplied by PERSAL**

DATE; EMIS; CIRCUIT; LOCATION; POST CLASS; POST TYPE; POST NUMBER; POST JOB TITLE; POST JOB TITLE DESCRIPTION; POST EVALUATED; POST EVALUATED DATE; JOB DESCRIPTION; JOB DESCRIPTION DATE; PERSAL NUMBER; APPOINTMENT NUMBER; SURNAME; INITIALS; FULL NAME; ID NUMBER; TITLE; DATE OF BIRTH; RACE; GENDER; MARITAL STATUS; MARITAL DATE; DISABLED; NATURE OF DISABILITY DESCRIPTION; HOME LANGUAGE; NATIONALITY; NATIONALITY DESCRIPTION; FIRST DATE ON PERSAL; APPOINTMENT DATE; NATURE OF APPOINTMENT; RANK; JOB TITLE; OCCUPATIONAL CLASSIFICATION; OCCUPATIONAL LEVEL; NOTCH; SALARY LEVEL; FUTURE RESIGNATION DATE; CORRESPONDING LANGUAGE; DRIVER'S LICENCE TYPE; POSTAL ADDRESS; POSTAL CODE; HOME TELEPHONE CODE; HOME TELEPHONE NUMBER; SPOUSE MAIDEN NAME; SPOUSE NAME; SPOUSE DATE OF BIRTH; SPOUSE ID NUMBER; SPOUSE TITLE; NEXT OF KIN NAME; NEXT OF KIN RELATIONSHIP; NEXT OF KIN TELEPHONE NUMBER; CELLPHONE NUMBER; UNION MEMBER NUMBER; UNION DESCRIPTION; UNION DATE JOINED; TAX NUMBER; RESPONSIBILITY; OBJECTIVE; PAYPOINT TELEPHONE NUMBER; VACATION ;VACATION PREVIOUS; SICK FULL; CAPPED LEAVE CREDIT; COMPONENT REGION; COMPONENT PAY POINT

**APPENDIX C: Managing teacher demand and supply: A conceptual framework**  
 (Source: Santiago P, 2002)

**Chart 1 - Managing Teacher Demand and Supply: A Conceptual Framework**



**APPENDIX D: Number of educator questionnaires obtained from sample schools**

**Table 5.6: Number of EQs obtained from each sample school and the number of teachers employed at the school according to the School Survey**

School	Number of EQs used in analysis					Total EQ	Total sample pop. (School Survey)
	WCED paid	SGB paid	Other funder	Don't know	Blank		
1	43	1	1			45	46
2	28					28	33
3	13	2				15	16
4	3					3	2
5	18					18	21
6	39	12				51	51
7	34					34	34
8	24	20	1			45	49
9	37	21		1		59	59
10	32	2				34	35
11	48	3				51	51
12	27					27	37
13	22	1				23	29
14	11	2				13	13
15	49	24		1		74	75
16	10					10	11
17	41					41	45
18	40					40	50
19	45					45	51
20	32					32	32
21	25				1	26	31
22	38	2				40	40
23	5	2				7*	4
24	28	14				42	44
25	12	4				16	21
26	26	3				29	30
27	24	6				30	30
28	46					46*	45
29	26	2				28	30
30	36					36	37
31	15					15	16
32	17	2				19	26
33	39					39	45
34	25					25	35
35	28	1				29	34
36	26	1				27	27
37	29	1				30	33
38	43					43	49
39	17	8				25	25
40	28	2				30	30
41	35	2				37	41
42	15	11				26	30
43	26	1				27	28
44	24	1				25	33
45	27	1				28*	27
46	21	9				30	30
47	38					38	43
48	10	6			1	17	17
49	28	3				31	41
50	5	3				8	8

**Table 5.6: Number of EQs obtained from each sample school and the number of teachers employed at the school according to the School Survey (contd)**

School	Number of EQs used in analysis					Total EQ	Total sample pop. (School Survey)
	WCED paid	SGB paid	Other funder	Don't know	Blank		
51	29	2				31	31
52	5	1				6*	5
53	18	2				20	20
54	31	2				33	34
55	32	14				46	46
56	19	2				21	21
57	35					35	45
58	27					27	33
59	25					25	35
60	26					26	27
61	33					33	
62	29	3		1		33	39
63	33					33	32
64	28	2				30	31
65	22					22	41
66	18					18	18
67	35					35	38
68	23	20				43	43
69	12	1				13	12
70	24	1				25	28
71	2	1				3	3
72	31					31	31
73	39					39	48
74	11	2				13	13
75	18	12				30	32
76	18	9				27	27
77	40	4		1		45	48
78	21	2				23	20
79	43	2				45	45
80	48	2				50	48
81	37					37	43
82	22	4		1		27	28
83	39	1			1	41	43
84	29				1	30	47
85	2					2	2
86	29	11				40	40
87	32	1				33	33
88	29	2				31	31
89	27	2				29	29
90	24	1				25	25
91	41					41	43
92	21	3				24	31
93	13	6				19	20
94	16					16	18
95	9	7				16	15
96	51	20				71	72
97	29	6				35	35
98	36	1				37	37
99	33					33	34
100	30	31				61	70

**Table 5.6: Number of EQs obtained from each sample school and the number of teachers employed at the school according to the School Survey (contd)**

School	Number of EQs used in analysis					Total EQ	Total sample pop. (School Survey)
	WCED paid	SGB paid	Other funder	Don't know	Blank		
101	32	2				34	39
102	38					38	45
103	41					41	42
104	35	3				38	43
105	16	10				26	26
106	19	1				20	23
107	28					28	29
108	32	17				49	49
109	17	5				22	21
110	30	3				33	34
111	30					30	33
112	32					32	35
113	31					31	33
114	32	2				34	34
115	26	1				27	28
116	37					37	40
117	40	1				41	41
118	36					36	44
119	13	6				19	19
120	43					43	43
121	44					44	30
122	34					34	35
123	24	1				25	25
124	28					28	33
125	18	15				33	19
126	29		1			30	32
127	24	1				25	25
128	29	18				47	52
129	25					25	40
130	33	2				35	40
131	24	1				25	26
132	38					38	38
133	24			2		26	35
134	29	1				30	32
135	22	1				23	26
136	29	2				31	31
137	26					26	30
138	32	1				33	36
139	27				1	28	35
140	37			1		38	41
141	29				1	30	40
142	11	4				15	17
143	1					1	1
144	2					2	2
145	10	3				13	15
146	29		1			30	36
147	4	1				5	5
148	20	1				21	23
149	23	21				44	44
150	41	3				44	44
151	9	2				11	13
<b>TOTAL</b>	<b>4045</b>	<b>482</b>	<b>4</b>	<b>8</b>	<b>6</b>	<b>4545</b>	<b>4862</b>

**APPENDIX E: GET subject framework – Clusters of ‘acceptable’ subject specialisations**

<b>1 MAIN OFFICIAL LANGUAGES FOR W.CAPE</b>				
<p><b>English</b> English literature English studies</p> <p><b>Business communication</b> Business English Communication English usage Practical English</p> <p><b>Linguistics</b> Applied language studies Applied English language studies Applied linguistics Literature</p>	<p><b>Afrikaans</b> Afrikaans literature Afrikaans-Nederlands Afrikaans-Nederlands studies</p>	<p><b>isiXhosa</b> African language studies African literature Language and culture Literacy and cultural theory</p>	<p><b>2A</b> <b>Applied Mathematics Statistics</b> Additional mathematics Applied statistics Mathematical statistics</p>	<p><b>2B</b> <b>Numeracy</b> Arithmetic</p>
<p><b>2</b> <b>Mathematics</b> Advanced mathematics Algebra General mathematics Geometry Mathematical science/s</p>	<p><b>2C</b> <b>Mathematical literacy</b> Commercial mathematics Functional mathematics</p>	<p><b>2D</b> <b>Mathematical/Mathematics education</b></p>		

<p><b>3</b></p> <p><b>Natural Sciences</b>  General science  Applied science  Science education</p>	<p><b>3A</b></p> <p><b>Life Sciences</b>  Anatomy  Animal biology  Bacteriology  Biochemistry  Biological science  Biology  Botany  Cell biology  Genetics  Health Education  Health Sciences  Microbiology  Nature studies  Entomology  Physiology  Physiology and hygiene  Zoology</p>	<p><b>3B</b></p> <p><b>Physical Science/s</b>  Analytical chemistry  Chemical engineering  Chemistry  Industrial chemistry  Inorganic chemistry  Organic chemistry  Physical chemistry  Physics  Pure science</p>	<p><b>3C</b></p> <p><b>Earth Sciences</b>  Agronomy  Geology  Soil science/s</p>	<p><b>3D</b></p> <p><b>Agricultural science/s</b>  Agriculture biochemistry  Animal husbandry  Animal production  Animal sciences  Equine studies  Field husbandry  Gardening  Grassland science  Horticulture  Pasture management  Pasture science  Plant production  Plant sciences  Practical agricultural science  Veterinary practice  Wildlife management</p>
<p><b>4</b></p> <p><b>Social sciences</b>  Human and social sciences</p>	<p><b>4A</b></p> <p><b>History</b>  African history  African studies  Ancient history/culture  Archaeology  Classical studies  Economic history  Historical studies  Political science  Political studies</p>	<p><b>4B</b></p> <p><b>Cultural Studies</b>  Anthropology  Ethnology  Social anthropology</p> <p><b>Human Rights Education</b>  Anti-racism Education  Citizenship and Democracy Studies  Civics/Civic Responsibility  Diversity Studies  Values and Human Rights</p>	<p><b>4C</b></p> <p><b>Geography</b>  Astronomy  Development studies  Earth Sciences  Earth-space science  Geographical science  Geographical studies  Oceanography</p>	<p><b>4D</b></p> <p><b>Environmental Education</b>  Biodiversity  Ecology  Environmental science  Environmental studies  Marine ecology</p>

<p><b>5</b> <b><u>Life Orientation</u></b></p>	<p><b>5A</b> <b>Psychology and Guidance and counselling</b> Life skills Applied psychology Career guidance Clinical psychology Counselling Developmental psychology Educational guidance Education Psychology Family guidance Industrial psychology Organisational psychology Psychometrics School guidance Stress management Vocational guidance</p>	<p><b>5B</b> <b>Religion Studies</b> Bible education Biblical/Bible studies Christian doctrine Church history/ studies Comparative religion Hindu studies Islamic studies Jewish studies Philosophy of religion Religious education Religious studies Right living Scripture Systematic theology Theological ethics Theology</p>	<p><b>5C</b> <b>Physical Education Human Movement Studies</b> Athletics Bio kinetics Ergonomics (human) Physical training Sports science Sports and exercise science Sport and recreation Sports administration Sports coaching (e.g. swimming, athletics, etc.) Sports fitness Sports history Sports injuries Sports psychology</p>	<p><b>5D</b> <b>Health Education</b> Child health First aid Health care Health sciences HIV/AIDS education Hygiene Nursing</p>	<p><b>5E</b> <b>Human rights education</b> Anti-racism education Citizenship studies democracy studies Civic responsibility, human rights/ values and human rights Civics/civic responsibility Diversity studies Gender studies Social development Social theory Sociology Values and human rights</p>	<p><b>5F</b> <b>Philosophy</b> Applied ethics Comparative ethics Ethics</p>	<p><b>5G</b> <b>Thinking skills</b> Cognitive skills/ Cognition Critical thinking Logic Logic and language</p>	<p><b>5H</b> <b>Law</b> <b>Criminology</b> Law of criminal procedure and evidence Private law Roman law South African criminal law Statute law</p>
--	---	--	--	--	--	---	--	--

<p><b>6</b> <b><u>Economic and Management Sciences</u></b></p>	<p><b>6A</b> <b>Accounting/accountancy</b> Applied accounting Bookkeeping Commercial mathematics Cost accounting Cost and Management accounting Financial accountancy Financial management Financial mathematics Pastel accounting Practical accounting</p>	<p><b>6B</b> <b>Business studies</b> <b>Marketing</b> <b>Commercial law</b> Advertising Agribusiness Business administration Business economics Business law Business practice Business theory Commerce Client services Company law Consumer behaviour Corporate law Entrepreneurship Mercantile law Motor trade theory New venture creation Public Policy Public relations</p>	<p><b>6C</b> <b>Economics</b> <b>Utility studies</b> Agricultural economics Economics education Economic Environment Industrial economics Maritime economics</p>	<p><b>6E</b> <b>Hospitality Studies</b> <b>Tourism</b> Hospitality generics Hotel and tourism International travel Management Tourism and travel Science of tourism Hotel keeping and catering Hotel law  Restaurant studies Sustainable tourism Travel agency operation</p>	<p><b>6F</b> <b>Management</b> <b>Labour relations</b> Agricultural management practices Business management Construction contracting Human resource development Industrial sociology Institutional management Labour law Management practices Office administration/practice Operations management Organisational management/development/administration Personal assistance Personnel management Project management Public administration Shop and office practice State administration Statute Law</p>
--	---	---	--	--	--

<p><b>7 Technology</b>          Technical theory and practice          Basic technical skills          Basic techniques          Engineering fundamentals          Engineering science          Engineering technology          Engineering systems          Skills and techniques          Technical orientation</p>	<p><b>7A Computer Studies and IT</b>          Computer applications          technology          Computer education          science          Computer graphics          Computer hardware          and software          Computer literacy          Computer operating          systems          Computer practice          Computer          programming          Computer science          Computer software          development          Computer software          programmes e.g.          Access, Excel, Corel,          WordPerfect, etc.          Computer technology          Data communications          networking          Data metrics          Data processing          Database design          Informatics          Information          communication          Information          Management          Information processing          Information science          Information skills          Information systems          Information technology          Internet and web site          use          Office data processing          Software methodology          System analysis and          design          Web server design</p>	<p><b>7B Consumer studies</b>  <b>Food technology</b>  <b>Home economics</b>          Agricultural food          technology          Catering Theory          Cookery          Culinary skills          Domestic science          Dietetics          Food and Beverage          Service          Food and nutrition          Food preparation          Food preparation          Food science          Home craft          Home management          Hotelkeeping and          catering          House craft          Housekeeping and food          service management          Nutrition          Sanitation and          housekeeping          Science of nutrition</p>	<p><b>7C Clothing and textiles</b>          Dressmaking          Fabric construction/          testing/processing          Fashion designing          Fibre arts          Garment construction          Needlecraft          Needlework          Needlework and          clothing,          Pattern making and          cutting</p>	<p><b>7D Technical drawing</b>  <b>Design Technology</b>          Architectural drawing          Art design          Building drawings          Draftsmanship          Civil drawing          Commercial Art          Design          Design (Art)          Design and planning          technology          Drawing (technical)          Engineering drawing          Engineering graphics          and design          Graphic Art          Graphic Design          Industrial art          Industrial graphics and          design          Machine design          Land surveying          Quantity surveying          Surveying          Trade theory</p>	<p><b>7E Metalwork/ing</b>  <b>Woodworking</b>          Arc welding          Assembling          Boilermaking          Cabinet making          Carpentry          Fitting and machining          Fitting and turning          Handwork          Motor body repairing          Panelbeating          Sheet-metal work          services/          sheetmetalworking          Spray painting          Welding and          metalwork          Welding work          Woodwork          Woodwork and          metalwork          Woodworking          Workshop practice</p>	<p><b>7F Building construction</b>          Bricklaying and          plastering,          Building construction          theory          Building science          Civil engineering          Civil technology          Construction          contracting          Constructing          equipment and          machinery          Construction material          Construction material          Construction          technology          Painting and          decorating          Plumbing          Strength of materials          and structures          Technika: civil</p>	<p><b>7G Electrical Technology</b>          Digital electronics          Electrical engineering          Electrical principles          and practice          Electrical systems          Electrician-work          Electronics          Electonics          engineering          Industrial electronics          Technika: electrical          Television and          radiofricians work</p>	<p><b>7H Mechanical technology</b>  <b>Motor mechanics</b>          Agricultural          technology          Air conditioning          refrigeration          Automotive repair and          maintenance          Engineering          mechanics          Farm mechanics/          mechanisation          Fluid mechanics          Mechanical          engineering          Mechanical properties          Mechano-technics          Motor vehicle          construction          Motor vehicle repair          services          Power machines          Refrigeration          Technika: mechanical          Tractor mechanics          Trade theory and          workshop mechanics          Watchmaking</p>
---	--	---	---	--	---	---	--	--

<p><b>8</b> <b>Arts and Culture</b> Integrated Arts</p>	<p><b>8A</b> <b>Music</b> Class music/class singing Harmony and counterpoint Harmony, counterpoint and composition History of music Instrumental music Jazz studies Knowledge of instruments (music) Music appreciation Music composition Music education Music first instrument Music second instrument/singing Music performance (second instrument/singing) Musical form Music practical Musicology Notation (music) Orchestral training Professional practice-performance music School music Singing Theory of music</p>	<p><b>8B</b> <b>Dramatic Art/s</b> Drama Film and drama Film &amp; TV production Film studies History of theatre, costume and literature Performing arts Speech and communication Speech and drama Speech and speech-reading Speech therapy Speech training Theatre arts</p>	<p><b>8C</b> <b>Dance Studies</b> African dance Ballet (imperial/cecchetti) Ballroom dance (including modern ballroom) Choreography Dance Eurhythmy Historical dance History of dance Human movement studies Latin American dance Modern dance Movement education National dance Practical ballet Professional practice-performance ballet Tap dance Theatre dance</p>	<p><b>8D</b> <b>Fine Art/s</b> Art documentation and research Art education Art history Art historical studies Art (practical) Art (theory) Art therapy Ceramics (practical) Drawing and painting (art practical) History of art Science of art Sculpture (practical) Theory of art Visual arts</p>	<p><b>8E</b> <b>Art Design</b> <b>Graphic art</b> Commercial art Communication design (Art) Design (Art) Design and painting, Design and sculpture Graphic Design Interior design Jewellery Lithographical printing Printmaking (practical) Photography</p>	<p><b>8F</b> <b>Arts and Crafts</b> Art and handicraft Basic handicraft creative Arts General handwork Handwork Puppetry</p>
---	--	--	--	---	---	--

## **APPENDIX F: FET subject framework – Clusters of ‘acceptable’ subject specialisations**

### **ACCOUNTING**

Accounting/Accountancy  
Applied accounting  
Bookkeeping  
Commercial mathematics  
Cost accounting  
Cost and management accounting  
Financial accountancy  
Financial management  
Financial mathematics  
Pastel accounting  
Practical accounting

### **AGRICULTURAL MANAGEMENT PRACTICES**

Animal husbandry  
Animal production  
Field husbandry  
Gardening  
Horticulture  
Pasture management  
Plant production  
Wildlife management

Agribusiness  
Agricultural management practices  
Agricultural economics

### **AGRICULTURAL SCIENCE**

**Agricultural Science/s**<sup>9</sup>  
Agriculture biochemistry  
Animal husbandry  
Animal sciences  
Equine studies  
Field husbandry  
Gardening  
Grassland science  
Horticulture  
Pasture science  
Plant sciences  
Practical agricultural science  
Veterinary practice  
Agronomy  
Soil science

### **Life Sciences**

Anatomy  
Animal biology  
Bacteriology  
Biochemistry  
Biological science  
Biology  
Botany  
Cell Biology  
Genetics  
Microbiology

---

<sup>9</sup> Subjects in bold indicate subject cluster headings.

Entomology  
Physiology  
Physiology and hygiene  
Zoology

### **AGRICULTURAL TECHNOLOGY**

#### **Agricultural food technology**

Agricultural technology  
Farm mechanics/mechanisation  
Tractor mechanics

#### **Mechanical technology**

##### **Motor mechanics**

Automotive repair and maintenance  
Engineering mechanics  
Fluid mechanics  
Mechanical engineering  
Mechanical properties  
Mechano-technics  
Motor vehicle construction  
Motor vehicle repair services  
Power machines  
Technika: mechanical  
Trade theory and workshop mechanics

### **BUSINESS STUDIES**

#### **Business studies**

##### **Marketing**

##### **Commercial law**

Advertising  
Agribusiness  
Business administration  
Business economics  
Business law  
Business management  
Business practice  
Business theory  
Commerce  
Client services  
Company law  
Consumer behaviour  
Corporate law  
Economic environment  
Entrepreneurship  
Institutional management  
Management practices  
Mercantile law  
Motor trade theory  
New venture creation  
Office administration/practice  
Operations management  
Organisational management/development/administration  
Personnel management  
Public administration/management  
Public relations  
Shop and office practice  
State administration  
Management  
Labour relations  
Agricultural management practices

Construction contracting  
Human resource development  
Industrial psychology  
Industrial sociology  
Institutional management  
Labour law  
Labour relations  
Office administration/practice  
Operations management  
Organisational management/development/administration  
Organisational psychology  
Personal assistance  
Personnel management  
Project management  
Public administration/management  
Public policy  
State administration  
Shop and office practice  
Statute law

### **CIVIL TECHNOLOGY**

#### **Building Construction**

Building construction theory  
Building science  
Civil engineering  
Civil technology  
Constructing equipment and machinery  
Construction contracting  
Construction material  
Construction technology  
Plumbing  
Quantity surveying  
Strength of materials and structures  
Technika: civil

#### **Technical drawing**

#### **Design technology**

Architectural drawing  
Building drawings  
Draftmanship  
Civil drawing  
Design and planning technology  
Drawing (technical)  
Engineering graphics and design  
Industrial art  
Industrial graphics and design  
Machine design  
Land surveying  
Surveying  
Computer Applications Technology

### **COMPUTER APPLICATIONS TECHNOLOGY**

#### **Computer Studies**

Computer applications technology  
Computer education science  
Computer graphics  
Computer hardware and software  
Computer operating systems  
Computer practice  
Computer programming  
Computer science

Computer software development  
Computer software programmes e.g. Access, Excel, Corel, WordPerfect, etc.  
Computer technology  
Data communications networking  
Data processing  
Database design  
Informatics  
Information communication  
Information management  
Information science  
Information skills  
Information systems  
Information technology  
Internet and website use  
Software methodology  
System analysis and design  
Web server design

### **Typing**

#### **Computyping**

Audiotyping  
Copytyping  
Dictaphone typing  
Word processing

### **CONSUMER STUDIES**

#### **Consumer Studies**

Agricultural food technology  
Dietetics  
Domestic science  
Food and nutrition  
Food science  
Food technology  
Home Economics  
Housekeeping and food service management  
Nutrition  
Science of nutrition

#### **Clothing and Textiles**

Fabric construction/testing/processing  
Fashion designing  
Fibre arts  
Garment construction  
Needlework  
Needlework and clothing

#### **Business Studies**

##### **Marketing**

Advertising  
Business economics  
Commerce  
Client services  
Consumer behaviour  
Economic education  
Economics  
Entrepreneurship  
New venture creation  
Public relations  
Utility studies

## **DANCE STUDIES**

### **Dance Studies**

African dance  
Ballet (Imperial/Cecchetti)  
Ballroom dance (including modern ballroom)  
Choreography  
Dance  
Eurhythmy  
Historical dance  
History of dance  
Human movement studies  
Latin American dance  
Modern dance  
Movement education  
National dance  
Practical ballet  
Professional practice-performance ballet  
Tap dance  
Theatre dance

## **DESIGN**

### **Art Design**

#### **Graphic Art**

Commercial art  
Communication design (Art)  
Computer graphics  
Computer science  
Design (Art)  
Design and painting  
Design and sculpture  
Graphic design  
Interior design  
Jewellery  
Lithographical printing  
Printmaking (practical)  
Photography

## **DRAMATIC ARTS**

### **Dramatic Art/s**

Drama  
Film and drama  
Film and TV production  
Film studies  
History of theatre, costume and literature  
Performing arts  
Speech and communication  
Speech and drama  
Speech and speech-reading  
Speech training  
Theatre arts

## **ECONOMICS**

### **Economics**

#### **Utility Studies**

Agricultural economics  
Economics education  
Economic environment  
Industrial economics  
Maritime economics

## **ELECTRICAL TECHNOLOGY**

### **Electrical Technology**

Digital electronics  
Electrical engineering  
Electrical principles and practice  
Electrical systems  
Electrician-work  
Electronics  
Electronics engineering  
Industrial electronics  
Technika: electrical  
Technika: electronical  
Television and radiotricians work

## **ENGINEERING GRAPHICS AND DESIGN**

### **Engineering Graphics and Design**

Technology  
Computer graphics  
Computer science  
Engineering fundamental  
Engineering science  
Engineering technology  
Engineering systems  
Technical drawing/Design Technology  
Architectural drawing  
Building drawing/Draftsmanship  
Civil drawing  
Design and planning technology  
Draftsmanship  
Drawing (technical)  
Engineering drawing  
Engineering graphics and design  
Industrial art  
Industrial graphics and design  
Land surveying  
Machine design

## **GEOGRAPHY**

### **Geography**

Astronomy  
Development studies  
Earth-space science  
Geographical science  
Geographical studies  
Oceanography

### **Earth Sciences**

Agronomy  
Geology  
Soil science

### **Environmental Education**

Biodiversity  
Ecology  
Environmental science  
Environmental studies  
Marine ecology

## **HISTORY**

### **History**

African history  
African studies  
Ancient history/culture  
Archaeology  
Classical studies  
Economic history  
Historical studies  
Political science/studies

### **Cultural Studies**

Anthropology  
Ethnology  
Social anthropology

### **Human Rights Education**

Anti-racism education  
Citizenship and democracy studies  
Civics/civic responsibility  
Diversity studies  
Values and human rights

## **HOSPITALITY STUDIES**

### **Hospitality Studies**

Hospitality generics  
Hotel and tourism management  
Hotel keeping and catering  
Restaurant studies  
Hotel law

### **Consumer Studies**

#### **Food Technology**

Agricultural food technology  
Cookery  
Cookery and nutrition  
Culinary skills  
Dietetics  
Domestic Science  
Food and nutrition  
Food preparation  
Food science  
Home Economics  
Housekeeping and food service management  
Nutrition  
Science of nutrition

## **INFORMATION TECHNOLOGY**

### **Information technology**

#### **Computer studies**

Computer hardware and software  
Computer literacy  
Computer operating systems  
Computer practice  
Computer science  
Computer programming  
Computer software development  
Computer software programmes e.g. Access, Excel, Corel, WordPerfect, etc.  
Computer technology  
Data communications networking

Datametrics  
Data processing  
Database design  
Informatics  
Information communication  
Information Management  
Information processing  
Information science  
Information skills  
Information systems  
Information technology  
Internet and web site use  
Office data processing  
Software methodology  
System analysis and design  
Web server design

### **LIFE ORIENTATION**

#### **Life orientation**

##### **Psychology**

##### **Guidance and Counselling Psychology**

Applied psychology  
Career guidance  
Clinical psychology  
Counselling  
Developmental psychology  
Educational guidance  
Educational psychology  
Family guidance  
Guidance  
Industrial psychology  
Organisational psychology  
Psychometrics  
School guidance  
Stress management  
Vocational guidance

##### **Physical education**

##### **Human Movement Studies**

Athletics  
Bio kinetics  
Ergonomics (human)  
Physical training  
Sports science  
Sports and exercise science  
Sport and recreation  
Sports administration  
Sports coaching (e.g. swimming, athletics, etc.)  
Sports fitness  
Sports history  
Sports injuries  
Sports psychology

##### **Human rights education**

Anti-racism education  
Citizenship and democracy studies  
Civics/civic responsibility  
Criminology  
Diversity studies  
Ethics

Gender studies  
Social development  
Social theory  
Sociology  
Values and human rights

**Thinking skills**

Cognitive skills/Cognition  
Critical thinking  
Logic  
Logic and language

**Law**

**Criminology**

Law of criminal procedure and evidence  
Private law  
Roman law  
South African criminal law  
Statute law

**Health education**

First aid  
Health care  
Health sciences  
HIV/AIDS education  
Hygiene  
Nursing

**Religion studies**

Bible education  
Biblical/Bible studies  
Christian doctrine  
Church history/studies  
Comparative religion  
Hindu studies  
Islamic studies  
Jewish studies  
Philosophy of religion  
Religious education  
Religious studies  
Right living  
Scripture  
Systematic theology  
Theological studies  
Theology

**LIFE SCIENCES**

**Life sciences**

Anatomy  
Animal biology  
Bacteriology  
Biochemistry  
Biological science  
Biology  
Botany  
Cell biology  
Genetics  
Microbiology  
Entomology  
Organic chemistry

Physiology  
Physiology and hygiene  
Zoology

**Agricultural Science/s**

Agriculture biochemistry  
Animal husbandry  
Animal sciences  
Equine studies  
Field husbandry  
Gardening  
Grassland science  
Horticulture  
Pasture science  
Plant sciences  
Practical agricultural science  
Veterinary practice  
Agronomy  
Soil science

**MATHEMATICAL LITERACY**

**Mathematical Literacy**

Commercial mathematics  
Functional mathematics  
General mathematics  
Mathematical science/s

**Mathematics**

Advanced mathematics  
Mathematical sciences  
Applied mathematics  
Additional mathematics  
Statistics

**Mathematical/Mathematics education**

**MATHEMATICS**

**Mathematics**

Advanced mathematics  
Algebra  
General mathematics  
Geometry  
Mathematical science/s

**Applied mathematics**

**Statistics**

Additional mathematics  
Applied statistics  
Mathematical statistics

**Mathematical/Mathematics education**

**Mathematical literacy**

Commercial mathematics  
Functional mathematics

**MECHANICAL TECHNOLOGY**

Mechanical technology  
Agricultural technology  
Air conditioning refrigeration

Automotive repair and maintenance  
Engineering fundamentals  
Engineering mechanics  
Engineering science  
Engineering technology  
Farm mechanics/mechanisation  
Fluid mechanics  
Mechanical engineering  
Mechanical properties  
Mechano-technics  
Motor mechanics  
Motor vehicle construction  
Motor vehicle repair services  
Power machines  
Refrigeration  
Technology  
Technika: mechanical  
Tractor mechanics  
Trade theory and workshop mechanics

## **MUSIC**

### **Music**

Class music/singing  
Harmony and counterpoint  
Harmony, counterpoint and composition  
History of music  
Instrumental music  
Jazz studies  
Knowledge of instruments (music)  
Music appreciation  
Music composition  
Music education  
Music first instrument  
Music second instrument/singing  
Music performance (second instrument/singing)  
Musical form  
Music practical  
Musicology  
Notation (music)  
Orchestral training  
Professional practice-performance music  
School music  
Singing  
Theory of music

## **PHYSICAL SCIENCES**

### **Physical Science/s**

Applied science  
Analytical chemistry  
Chemical engineering  
Chemistry  
Industrial chemistry  
Inorganic chemistry  
Organic chemistry  
Physical chemistry  
Physics  
Pure science  
Science education

## **RELIGION STUDIES**

### **Religion Studies**

Bible education  
Biblical/Bible studies  
Christian doctrine  
Church history/studies  
Comparative religion  
Hindu studies  
Islamic studies  
Jewish studies  
Philosophy of religion  
Religious education  
Religious studies  
Right living  
Scripture  
Systematic theology  
Theological ethics  
Theology

### **Philosophy**

Applied ethics  
Comparative ethics  
Ethics

## **TOURISM**

### **Tourism**

Geography  
History  
Hospitality generics  
Hospitality studies  
Hotel and tourism management  
Hotel keeping and catering  
Hotel law  
International travel  
Restaurant studies  
Science of tourism  
Sustainable tourism  
Travel agency operation  
Tourism and travel

## **VISUAL ARTS**

### **Fine Art/s**

Art documentation and research  
Art education  
Art history  
Art historical studies  
Art (practical)  
Art (theory)  
Ceramics (practical)  
Drawing and painting (art practical)  
History of art  
Science of art  
Sculpture (practical)  
Theory of art  
Visual arts

### **Art design**

Graphic art  
Commercial art  
Communication design (Art)  
Design (Art)

Design and painting  
Design and sculpture  
Graphic design  
Creative arts

**MAIN OFFICIAL LANGUAGES – W CAPE**

**Afrikaans**

Afrikaans literature  
Afrikaans-Nederlands  
Afrikaans-Nederlands studies

**English**

Business English  
English literature  
English studies  
English usage  
Linguistics  
Literature  
Practical English

**isiXhosa**

African literature  
Language and culture  
Linguistics

**APPENDIX G: Comparative data on the count of FET teachers in the Metro East schools, and the count in Eden and Central Karoo schools, *with* a first general degree, and the count with a first general degree as well as a professional qualification for teaching at the secondary school level.**

**Tables 6.66 – 6.75 : FET teachers of core subjects *with* a first general degree, and with a first general degree and professional qualification for teaching at the secondary school level, in Metro East and Eden and Central Karoo schools**

**Table 6.66a: Afrikaans FET: Eden and Central Karoo**

Afrikaans Degree	Sec Prof		Total
	Yes	No	
Yes	59	1	60
No	0	30	30
<b>Total</b>	<b>59</b>	<b>31</b>	<b>90</b>

**Table 6.66b: Afrikaans FET: Metro East**

Afrikaans Degree	Sec Prof		Total
	Yes	No	
Yes	74	7	81
No	0	22	22
<b>Total</b>	<b>74</b>	<b>29</b>	<b>103</b>

**Table 6.67a: English FET: Eden and Central Karoo**

English Degree	Sec Prof		Total
	Yes	No	
Yes	43	7	50
No	0	33	33
<b>Total</b>	<b>43</b>	<b>40</b>	<b>83</b>

**Table 6.67b: English FET: Metro East**

English Degree	Sec Prof		Total
	Yes	No	
Yes	100	9	109
No	0	52	52
<b>Total</b>	<b>100</b>	<b>61</b>	<b>161</b>

**Table 6.68a: isiXhosa FET: Eden and Central Karoo**

isiXhosa Degree	Sec Prof		Total
	Yes	No	
Yes	5	1	6
No	0	7	7
<b>Total</b>	<b>5</b>	<b>8</b>	<b>13</b>

**Table 6.68b: isiXhosa FET: Metro East**

isiXhosa Degree	Sec Prof		Total
	Yes	No	
Yes	47	8	55
No	0	23	23
<b>Total</b>	<b>47</b>	<b>31</b>	<b>78</b>

**Table 6.69a: Geography FET: Eden and Central Karoo**

Geography Degree	Sec Prof		Total
	Yes	No	
Yes	20	0	20
No	0	21	21
<b>Total</b>	<b>20</b>	<b>21</b>	<b>41</b>

**Table 6.69b: Geography FET: Metro East**

Geography Degree	Sec Prof		Total
	Yes	No	
Yes	37	2	39
No	1	32	33
<b>Total</b>	<b>38</b>	<b>34</b>	<b>72</b>

**Table 6.70a: History FET: Eden and Central Karoo**

History Degree	Sec Prof		Total
	Yes	No	
Yes	21	1	22
No	0	8	8
<b>Total</b>	<b>21</b>	<b>9</b>	<b>30</b>

**Table 6.70b: History FET: Metro East**

History Degree	Sec Prof		Total
	Yes	No	
Yes	32	3	35
No	0	14	14
<b>Total</b>	<b>32</b>	<b>17</b>	<b>49</b>

**Table 6.71a: Life Sciences FET: Eden and Central Karoo**

Life Sciences	Sec Prof		Total
	Yes	No	
Yes	22	2	24
No	1	26	27
<b>Total</b>	<b>23</b>	<b>28</b>	<b>51</b>

**Table 6.71b: Life Sciences FET: Metro East**

Life Sciences	Sec Prof		Total
	Yes	No	
Yes	42	4	46
No	0	43	43
<b>Total</b>	<b>42</b>	<b>47</b>	<b>89</b>

**Table 6.72a: Mathematical Literacy FET: Eden and Central Karoo**

Mathematical Literacy	Sec Prof		Total
	Yes	No	
Yes	38	1	39
No	0	32	32
<b>Total</b>	<b>38</b>	<b>33</b>	<b>71</b>

**Table 6.72b: Mathematical Literacy FET: Metro East**

Mathematical Literacy	Sec Prof		Total
	Yes	No	
Yes	50	7	57
No	0	54	54
<b>Total</b>	<b>50</b>	<b>7</b>	<b>57</b>

**Table 6.73a: Mathematics FET: Eden and Central Karoo**

Mathematics	Sec Prof		Total
	Yes	No	
Yes	29	2	31
No	0	24	24
<b>Total</b>	<b>29</b>	<b>26</b>	<b>55</b>

**Table 6.73b: Mathematics FET: Metro East**

Mathematics	Sec Prof		Total
	Yes	No	
Yes	50	13	63
No	0	49	49
<b>Total</b>	<b>50</b>	<b>62</b>	<b>112</b>

**Table 6.74a: Physical Sciences: Eden and Central Karoo**

Physical Sciences	Sec Prof		Total
	Yes	No	
Yes	21	1	22
No	0	16	16
<b>Total</b>	<b>21</b>	<b>17</b>	<b>38</b>

**Table 6.74a: Physical Sciences: Metro East**

Physical Sciences	Sec Prof		Total
	Yes	No	
Yes	39	6	45
No	0	24	24
<b>Total</b>	<b>39</b>	<b>30</b>	<b>69</b>

**Table 6.75a: All core subjects: Eden and Central Karoo**

All core subjects	Sec Prof		Total
	Yes	No	
Yes	286	22	308
No	1	254	255
<b>Total</b>	<b>287</b>	<b>276</b>	<b>563</b>

**Table 6.75a: All core subjects: Metro East**

All core subjects	Sec Prof		Total
	Yes	No	
Yes	542	81	623
No	1	376	377
<b>Total</b>	<b>543</b>	<b>457</b>	<b>1000</b>

**APPENDIX H: Graduates from the education field (Western Cape): Estimates of numbers employed in teaching occupations, and the broad LFPR**

**Table 8:46: Broad labour market status by field of study in the Western Cape**

	Employed	Unemployed	Inactive	Total	LFPR	Unem%
<b>CENSUS</b>						
Agriculture	7 058	284	1 419	8 761	83.8%	3.9%
Architecture	3 603	268	793	4 664	83.0%	6.9%
Arts	6 999	595	2 530	10 124	75.0%	7.8%
Business/Commerce/Management	48 090	3 905	11 839	63 834	81.5%	7.5%
Communication	3 458	295	1 007	4 760	78.8%	7.9%
Computer	14 044	2 173	3 063	19 280	84.1%	13.4%
Education/Training/Development	<b>36 799</b>	<b>3 033</b>	<b>13 849</b>	<b>53 681</b>	<b>74.2%</b>	<b>7.6%</b>
Engineering	22 360	1 748	4 402	28 510	84.6%	7.3%
Health	22 181	908	6 057	29 146	79.2%	3.9%
Home Economics	2 112	189	1 302	3 603	63.9%	8.2%
Industrial Arts	4 540	443	1 212	6 195	80.4%	8.9%
Language/Linguistics/Literature	2 853	192	1 181	4 226	72.1%	6.3%
Law	8 507	514	1 780	10 801	83.5%	5.7%
Libraries/Museums	1 109	93	396	1 598	75.2%	7.7%
Life Science/Physical Science	4 787	134	1 853	6 774	72.6%	2.7%
Maths	1 671	91	483	2 245	78.5%	5.2%
Military	867	155	262	1 284	79.6%	15.2%
Philosophy/Theology	2 140	144	620	2 904	78.7%	6.3%
Physical Education/Leisure	991	121	508	1 620	68.6%	10.9%
Psychology	3 152	134	945	4 231	77.7%	4.1%
Public Admin/Social Services	4 652	598	1 771	7 021	74.8%	11.4%
Social Sciences/Studies	4 767	432	2 055	7 254	71.7%	8.3%
Others	19 636	2 030	4 858	26 524	81.7%	9.4%
All	226 376	18 479	64 185	309 040	79.2%	7.5%
<b>Labour Force Surveys</b>						
Communication/Language	7 882	1 293	2 298	11 473	80.0%	14.1%
Education/Training/Development	<b>49 634</b>	<b>3 775</b>	<b>13 762</b>	<b>67 171</b>	<b>79.5%</b>	<b>7.1%</b>
Manufacturing/Engineering/ Technology	48 567	1 457	3 933	53 957	92.7%	2.9%
Human/Social Studies	17 663	401	5 287	23 351	77.4%	2.2%
Law/Military Science and Security	8 863	209	3 161	12 233	74.2%	2.3%
Health	42 685	2 821	10 518	56 024	81.2%	6.2%
Agriculture & Nature Conservation	9 051	658	1 199	10 908	89.0%	6.8%
Culture & Arts	6 556	102	2 543	9 201	72.4%	1.5%
Business/Commerce/Management	86 721	2 392	9 850	98 963	90.0%	2.7%
Physical/Mathematical/Computer/ Life Sciences	27 418	6 456	5 929	39 803	85.1%	19.1%
Service	9 842	1 081	1 983	12 906	84.6%	9.9%
Construction	7 178	0	308	7 486	95.9%	0.0%
Don't know	943	248	0	1 191	100.0%	20.8%
Unspecified	5 547	444	4 186	10 177	58.9%	7.4%
Total	328 550	21 337	64 957	414 844	84.3%	6.1%

**Table 8.47: Broad labour market status of graduates from the education field by province**

	Employed	Unemployed	Inactive	Total	LFPR	Unem %
<b>CENSUS</b>						
Western Cape	36 799	3 033	13 849	53 681	74.2%	7.6%
Eastern Cape	53 629	11 398	7 943	72 970	89.1%	17.5%
Northern Cape	5 956	267	1 620	7 843	79.3%	4.3%
Free State	20 272	3 557	3 718	27 547	86.5%	14.9%
KwaZulu-Natal	67 488	11 594	11 271	90 353	87.5%	14.7%
North West	30 775	5 148	4 024	39 947	89.9%	14.3%
Gauteng	72 551	9 573	14 348	96 472	85.1%	11.7%
Mpumalanga	22 243	3 660	2 614	28 517	90.8%	14.1%
Limpopo	52 567	15 716	6 146	74 429	91.7%	23.0%
South Africa	362 280	63 946	65 533	491 759	86.7%	15.0%
<b>Labour Force Surveys</b>						
Western Cape	49 634	3 775	13 762	67 171	79.5%	7.1%
Eastern Cape	88 694	4 305	4 285	97 284	95.6%	4.6%
Northern Cape	7 079	206	929	8 214	88.7%	2.8%
Free State	33 069	2 291	4 797	40 157	88.1%	6.5%
KwaZulu-Natal	96 593	1 953	9 341	107 887	91.3%	2.0%
North West	49 796	2 407	6 745	58 948	88.6%	4.6%
Gauteng	95 213	5 184	13 847	114 244	87.9%	5.2%
Mpumalanga	30 786	1 259	2 670	34 715	92.3%	3.9%
Limpopo	69 239	9 891	2 721	81 851	96.7%	12.5%
South Africa	520 103	31 271	59 097	610 471	90.3%	5.7%

**Table 8.48: Graduates from the education field: Western Cape District Council percentages in each employment status category**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
West Coast District Municipality	6.0%	3.8%	4.7%	7.0%	5.2%	5.4%
Boland District Municipality	15.8%	10.6%	15.1%	11.8%	16.3%	14.8%
Overberg District Municipality	7.6%	1.5%	3.5%	4.2%	3.8%	4.6%
Eden District Municipality	15.3%	10.6%	10.8%	10.0%	11.8%	12.0%
Central Karoo District Municipality	1.0%	2.6%	1.2%	0.5%	0.8%	1.1%
Cape Town: City of Cape Town	54.3%	71.0%	64.6%	66.5%	62.1%	62.2%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Labour Force Surveys</b>						
West Coast District Municipality	2.9%	3.9%	7.1%	5.0%	6.6%	5.7%
Boland District Municipality	11.4%	1.4%	14.8%	10.4%	14.1%	12.6%
Overberg District Municipality	5.4%	1.8%	3.1%	4.0%	0.6%	3.3%
Eden District Municipality	3.8%	6.9%	9.5%	5.7%	0.0%	6.5%
Central Karoo District Municipality	1.4%	1.7%	1.2%	1.2%	0.2%	1.1%
Cape Town: City of Cape Town	75.3%	84.3%	64.3%	73.8%	78.6%	70.8%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 8.49: Graduates from the education field, Western Cape: employment status percentages by District Council**

	Inact	Unemp	ETeac	EHSki	EOTH	All
<b>CENSUS</b>						
West Coast District Municipality	28.6%	4.0%	34.6%	17.7%	15.2%	100.0%
Boland District Municipality	27.5%	4.0%	40.4%	10.8%	17.3%	100.0%
Overberg District Municipality	42.7%	1.9%	30.1%	12.3%	13.1%	100.0%
Eden District Municipality	32.8%	5.0%	35.5%	11.3%	15.4%	100.0%
Central Karoo District Municipality	23.5%	14.0%	44.4%	6.2%	11.9%	100.0%
Cape Town: City of Cape Town	22.5%	6.4%	41.0%	14.5%	15.6%	100.0%
All	25.7%	5.6%	39.4%	13.5%	15.7%	100.0%
<b>Labour Force Surveys</b>						
West Coast District Municipality	10.3%	3.9%	58.9%	12.4%	14.6%	100.0%
Boland District Municipality	18.4%	0.6%	55.5%	11.5%	14.0%	100.0%
Overberg District Municipality	33.3%	3.0%	44.6%	16.9%	2.2%	100.0%
Eden District Municipality	12.0%	6.0%	69.6%	12.4%	0.0%	100.0%
Central Karoo District Municipality	25.5%	8.3%	49.7%	14.6%	2.0%	100.0%
Cape Town: City of Cape Town	21.8%	6.7%	43.0%	14.6%	14.0%	100.0%
All	20.5%	5.6%	47.3%	14.0%	12.6%	100.0%

**Table 8.50: Graduates from the education field, Western Cape: Percentages of people from each area type in each employment status category**

	Inact	Unemp	ETeac	EHSki	EOTH	All
<b>CENSUS</b>						
Urban	92.9%	97.5%	97.0%	95.8%	90.9%	94.9%
Rural	7.1%	2.5%	3.0%	4.2%	9.1%	5.1%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: Area type variable is no longer available since LFS September 2004.

**Table 8.51: Graduates from the education field, Western Cape: Employment status percentages within area type**

	Inact	Unemp	ETeac	EHSki	EOTH	All
<b>CENSUS</b>						
Urban	25.2%	5.8%	40.3%	13.7%	15.0%	25.2%
Rural	35.5%	2.8%	22.8%	11.0%	27.9%	35.5%
All	25.7%	5.6%	39.4%	13.5%	15.7%	100.0%

Note: Area type variable is no longer available since LFS September 2004.

**Table 8.52: Graduates from the education field, Western Cape: Racial percentages within in each employment status category**

	Inact	Unemp	ETeac	EHSki	EOTH	All
<b>CENSUS</b>						
Black	7.5%	58.9%	15.5%	7.5%	20.0%	15.5%
Coloured	31.3%	25.2%	44.8%	24.8%	32.2%	35.5%
Indian	1.0%	2.3%	1.1%	1.8%	2.1%	1.4%
White	60.3%	13.7%	38.7%	66.0%	45.7%	47.6%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Labour Force Surveys</b>						
Black	0.5%	37.2%	11.2%	7.1%	31.0%	12.4%
Coloured	28.2%	4.1%	54.3%	46.2%	8.6%	39.2%
Indian	1.4%	6.2%	0.0%	2.7%	3.0%	1.4%
White	69.8%	52.5%	34.5%	44.0%	57.4%	47.0%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 8.53: Graduates from the education field, Western Cape: Employment status percentages within race**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
Black	12.5%	21.4%	39.3%	6.6%	20.2%	100.0%
Coloured	22.7%	4.0%	49.7%	9.4%	14.2%	100.0%
Indian	17.9%	9.2%	32.6%	17.1%	23.3%	100.0%
White	32.6%	1.6%	32.0%	18.8%	15.1%	100.0%
All	25.7%	5.6%	39.4%	13.5%	15.7%	100.0%
<b>Labour Force Surveys</b>						
Black	0.9%	16.9%	42.8%	8.0%	31.5%	100.0%
Coloured	14.7%	0.6%	65.4%	16.5%	2.8%	100.0%
Indian	21.1%	25.1%	0.0%	26.9%	26.9%	100.0%
White	30.5%	6.3%	34.8%	13.2%	15.4%	100.0%
All	20.5%	5.6%	47.3%	14.0%	12.6%	100.0%

**Table 8.54: Graduates from the education field, Western Cape: Gender percentages within each employment status category**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
Male	19.4%	31.8%	29.4%	43.9%	34.4%	29.7%
Female	80.6%	68.2%	70.6%	56.1%	65.6%	70.3%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Labour Force Surveys</b>						
Male	15.8%	41.3%	26.5%	52.0%	22.7%	28.3%
Female	84.2%	58.7%	73.5%	48.0%	77.3%	71.7%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 8.55: Graduates from the education field, Western Cape: Employment status percentages within gender**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
Male	16.8%	6.0%	39.0%	20.0%	18.2%	100.0%
Female	29.5%	5.5%	39.6%	10.8%	14.6%	100.0%
All	25.7%	5.6%	39.4%	13.5%	15.7%	100.0%
<b>Labour Force Surveys</b>						
Male	11.5%	8.2%	44.4%	25.8%	10.1%	100.0%
Female	24.0%	4.6%	48.4%	9.4%	13.6%	100.0%
All	20.5%	5.6%	47.3%	14.0%	12.6%	100.0%

**Table 8.56: Graduates from the education field, Western Cape: Home language percentages within each employment status category**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
Afrikaans	62.3%	26.8%	52.5%	53.0%	49.4%	53.1%
English	30.6%	14.7%	32.4%	39.5%	30.7%	31.6%
Others	7.2%	58.5%	15.1%	7.5%	19.9%	15.2%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Labour Force Surveys</b>						
Afrikaans	42.5%	29.6%	54.9%	59.9%	36.7%	49.4%
English	57.0%	35.2%	34.3%	31.8%	32.3%	38.4%
Others	0.5%	35.2%	10.8%	8.3%	31.0%	12.3%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 8.57: Graduates from the education field, Western Cape: Employment status percentages within home language**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
Afrikaans	30.1%	2.9%	38.9%	13.5%	14.6%	100.0%
English	24.9%	2.6%	40.4%	16.9%	15.2%	100.0%
Others	12.1%	21.7%	39.1%	6.7%	20.5%	100.0%
All	25.7%	5.6%	39.4%	13.5%	15.7%	100.0%
<b>Labour Force Surveys</b>						
Afrikaans	17.6%	3.4%	52.6%	17.0%	9.3%	100.0%
English	30.4%	5.2%	42.2%	11.6%	10.6%	100.0%
Others	0.9%	16.1%	41.7%	9.5%	31.8%	100.0%
All	20.5%	5.6%	47.3%	14.0%	12.6%	100.0%

**Table 8.58: Graduates from the education field, Western Cape: Age group percentages within each employment status category**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
15-24 years	5.0%	10.7%	2.4%	1.1%	5.0%	3.8%
25-34 years	9.7%	51.4%	29.3%	19.9%	30.9%	24.5%
35-44 years	16.9%	21.4%	41.1%	38.4%	31.2%	31.9%
45-54 years	23.4%	13.0%	22.2%	29.6%	23.6%	23.2%
55-65 years	45.0%	3.6%	5.0%	10.9%	9.4%	16.7%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Labour Force Surveys</b>						
15-24 years	4.6%	2.6%	0.8%	0.0%	1.0%	1.6%
25-34 years	23.9%	59.2%	14.3%	14.9%	35.1%	21.5%
35-44 years	11.9%	31.9%	32.5%	27.5%	36.3%	28.0%
45-54 years	15.1%	3.4%	43.6%	38.0%	9.5%	30.5%
55-65 years	44.5%	2.9%	8.8%	19.6%	18.1%	18.5%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 8.59: Graduates from the education field, Western Cape: Employment status percentages within age group**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
15-24 years	34.0%	16.1%	25.2%	3.9%	20.8%	100.0%
25-34 years	10.2%	11.9%	47.2%	11.0%	19.8%	100.0%
35-44 years	13.7%	3.8%	50.9%	16.3%	15.3%	100.0%
45-54 years	25.9%	3.2%	37.8%	17.3%	15.9%	100.0%
55-65 years	69.4%	1.2%	11.7%	8.9%	8.9%	100.0%
All	25.7%	5.6%	39.4%	13.5%	15.7%	100.0%
<b>Labour Force Surveys</b>						
15-24 years	59.4%	9.4%	23.5%	0.0%	7.7%	100.0%
25-34 years	22.8%	15.5%	31.5%	9.7%	20.5%	100.0%
35-44 years	8.7%	6.4%	54.8%	13.8%	16.3%	100.0%
45-54 years	10.2%	0.6%	67.8%	17.5%	3.9%	100.0%
55-65 years	49.3%	0.9%	22.6%	14.9%	12.3%	100.0%
All	20.5%	5.6%	47.3%	14.0%	12.6%	100.0%

**Table 8.60: Graduates from the education field, Western Cape: Highest educational attainment percentages in each employment status category**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
Cert/Dip without Matric	6.3%	4.8%	2.9%	3.2%	7.3%	4.6%
Cert/Dip with Matric	65.3%	72.5%	61.9%	49.8%	63.9%	62.0%
Degree	10.4%	12.1%	10.3%	15.8%	11.9%	11.4%
Degree + Diploma/Honours	14.7%	9.0%	20.6%	24.0%	13.2%	17.7%
Master/PhD	3.4%	1.7%	4.2%	7.2%	3.8%	4.2%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Labour Force Surveys</b>						
Cert/Dip without Matric	4.3%	2.2%	14.3%	0.6%	9.6%	9.1%
Cert/Dip with Matric	56.0%	68.5%	60.8%	49.9%	80.3%	61.2%
Degree	20.6%	17.5%	13.0%	18.7%	7.3%	14.9%
Degree + Diploma/Honours	10.8%	11.5%	10.3%	23.3%	2.8%	11.4%
Master/PhD	8.3%	0.3%	1.6%	7.6%	0.0%	3.5%
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 8.61: Graduates from the education field, W Cape: Employment status percentages within highest educational attainment**

	Inact	Unemp	ETeac	EHSki	EOth	All
<b>CENSUS</b>						
Cert/Dip without Matric	34.9%	5.9%	25.1%	9.5%	24.7%	100.0%
Cert/Dip with Matric	27.1%	6.6%	39.4%	10.9%	16.1%	100.0%
Degree	23.4%	6.0%	35.6%	18.7%	16.3%	100.0%
Degree + Diploma/Honours	21.3%	2.9%	45.9%	18.3%	11.7%	100.0%
Master/PhD	20.9%	2.3%	39.5%	23.1%	14.2%	100.0%
All	25.7%	5.6%	39.4%	13.5%	15.7%	100.0%
<b>Labour Force Surveys</b>						
Cert/Dip without Matric	9.8%	1.3%	74.6%	0.9%	13.3%	100.0%
Cert/Dip with Matric	18.8%	6.3%	47.0%	11.4%	16.5%	100.0%
Degree	28.4%	6.6%	41.3%	17.6%	6.2%	100.0%
Degree + Diploma/Honours	19.5%	5.7%	43.0%	28.7%	3.1%	100.0%
Master/PhD	47.9%	0.5%	21.6%	30.0%	0.0%	100.0%
All	20.5%	5.6%	47.3%	14.0%	12.6%	100.0%

**Table 8.62: Graduates from the education field, Western Cape: Broad LFPRs, unemployment rates and percentage employed in teaching occupations**

	Survey	LFPR	Unempl%	Teach%
<b>Western Cape</b>				
Western Cape	Census	74.3%	7.6%	57.4%
	LFSs	79.5%	7.1%	64.0%
<b>District Council</b>				
West Coast District Municipality	Census	71.5%	5.5%	51.3%
	LFSs	89.7%	4.3%	68.6%
Boland District Municipality	Census	72.5%	5.6%	59.0%
	LFSs	81.6%	0.8%	68.5%
Overberg District Municipality	Census	57.3%	3.3%	54.2%
	LFSs	66.7%	4.6%	70.1%
Eden District Municipality	Census	67.2%	7.4%	57.1%
	LFSs	88.0%	6.8%	84.9%
Central Karoo District Municipality	Census	76.6%	18.3%	71.0%
	LFSs	74.5%	11.2%	75.0%
Cape Town: City of Cape Town	Census	77.5%	8.3%	57.6%
	LFSs	78.2%	8.6%	60.1%
<b>Area type</b>				
Urban	Census	74.8%	7.8%	58.4%
	LFSs		n/a	
Rural	Census	64.5%	4.3%	36.9%
	LFSs		n/a	
<b>Race</b>				
Black	Census	87.5%	24.5%	59.5%
	LFSs	99.1%	17.0%	52.0%
Coloured	Census	77.3%	5.2%	67.8%
	LFSs	85.3%	0.7%	77.2%
Indian	Census	82.1%	11.2%	44.7%
	LFSs	78.9%	31.7%	0.0%
White	Census	67.5%	2.4%	48.6%
	LFSs	69.6%	9.0%	54.9%
<b>Gender</b>				
Male	Census	83.2%	7.3%	50.5%
	LFSs	88.5%	9.3%	55.3%
Female	Census	70.5%	7.8%	60.9%
	LFSs	76.0%	6.1%	67.9%
<b>Home language</b>				
Afrikaans	Census	69.9%	4.1%	58.1%
	LFSs	82.4%	4.1%	66.6%
English	Census	75.1%	3.5%	55.7%
	LFSs	69.6%	7.4%	65.5%
Others	Census	87.9%	24.6%	59.0%
	LFSs	99.1%	16.3%	50.3%
<b>Age group</b>				
15-24 years	Census	66.1%	24.4%	50.5%
	LFSs	40.6%	23.1%	75.4%
25-34 years	Census	89.8%	13.2%	60.5%
	LFSs	77.2%	20.0%	51.0%
35-44 years	Census	86.3%	4.4%	61.7%
	LFSs	91.3%	7.0%	64.5%
45-54 years	Census	74.1%	4.3%	53.2%
	LFSs	89.8%	0.7%	76.0%
55-65 years	Census	30.6%	3.9%	39.7%
	LFSs	50.7%	1.7%	45.4%

**Table 8.62: Graduates from the education field, Western Cape: Broad LFPRs, unemployment rates and percentage employed in teaching occupations (contd)**

	Survey	LFPR	Unempl%	%Teach
<b>Highest educational attainment</b>				
Cert/Dip without Matric	Census	65.1%	9.0%	42.4%
	LFSs	90.2%	1.5%	84.0%
Cert/Dip with Matric	Census	72.9%	9.0%	59.3%
	LFSs	81.2%	7.7%	62.7%
Degree	Census	76.6%	7.8%	50.5%
	LFSs	71.7%	9.2%	63.5%
Degree + Diploma/Honours	Census	78.7%	3.6%	60.5%
	LFSs	80.5%	7.0%	57.4%
Master/PhD	Census	79.1%	3.0%	51.4%
	LFSs	52.1%	0.9%	41.9%

**Table 8.63: Employed in teaching occupations by province, Census**

	[A]	[B]	[C]	[D]	[E]	[F]	All
<b>Number of employed</b>							
Western Cape	4 180	1 398	10 139	1 379	14 141	13 174	44 411
Eastern Cape	3 252	1 920	14 773	1 067	33 304	12 490	66 806
Northern Cape	226	241	1 267	228	3 154	2 533	7 649
Free State	1 416	793	4 696	652	11 616	6 544	25 717
KwaZulu-Natal	4 680	2 041	19 119	1 718	37 227	23 410	88 195
North West	1 805	1 430	7 025	1 166	18 710	8 157	38 293
Gauteng	9 837	2 196	20 029	4 363	26 889	23 714	87 028
Mpumalanga	735	802	5 540	588	13 464	5 831	26 960
Limpopo	2 006	1 216	15 842	634	29 839	10 206	59 743
South Africa	28 137	12 037	98 430	11 795	188 344	106 059	444 802
<b>Teaching category percentage within each province</b>							
Western Cape	9.4%	3.1%	22.8%	3.1%	31.8%	29.7%	100.0%
Eastern Cape	4.9%	2.9%	22.1%	1.6%	49.9%	18.7%	100.0%
Northern Cape	3.0%	3.2%	16.6%	3.0%	41.2%	33.1%	100.0%
Free State	5.5%	3.1%	18.3%	2.5%	45.2%	25.4%	100.0%
KwaZulu-Natal	5.3%	2.3%	21.7%	1.9%	42.2%	26.5%	100.0%
North West	4.7%	3.7%	18.3%	3.0%	48.9%	21.3%	100.0%
Gauteng	11.3%	2.5%	23.0%	5.0%	30.9%	27.2%	100.0%
Mpumalanga	2.7%	3.0%	20.5%	2.2%	49.9%	21.6%	100.0%
Limpopo	3.4%	2.0%	26.5%	1.1%	49.9%	17.1%	100.0%
South Africa	6.3%	2.7%	22.1%	2.7%	42.3%	23.8%	100.0%
<b>Provincial percentages within each teaching category</b>							
Western Cape	14.9%	11.6%	10.3%	11.7%	7.5%	12.4%	10.0%
Eastern Cape	11.6%	16.0%	15.0%	9.0%	17.7%	11.8%	15.0%
Northern Cape	0.8%	2.0%	1.3%	1.9%	1.7%	2.4%	1.7%
Free State	5.0%	6.6%	4.8%	5.5%	6.2%	6.2%	5.8%
KwaZulu-Natal	16.6%	17.0%	19.4%	14.6%	19.8%	22.1%	19.8%
North West	6.4%	11.9%	7.1%	9.9%	9.9%	7.7%	8.6%
Gauteng	35.0%	18.2%	20.3%	37.0%	14.3%	22.4%	19.6%
Mpumalanga	2.6%	6.7%	5.6%	5.0%	7.1%	5.5%	6.1%
Limpopo	7.1%	10.1%	16.1%	5.4%	15.8%	9.6%	13.4%
South Africa	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[A]: Teaching professionals: College/University/Higher education institutions

[B]: Teaching professionals: Secondary

[C]: Teaching professionals: Primary/Pre-primary

[D]: Teaching professionals: Others

[E]: Teaching associate professionals: Primary

[F]: Teaching associate professionals: Others

**Table 8.64: Employed in teaching occupations by province, LFSs**

	[A]	[B]	[C]	[D]	[E]	[F]	All
<b>Number of employed</b>							
Western Cape	7 724	5 117	9 383	1 759	19 925	17 520	61 428
Eastern Cape	4 604	15 580	14 001	778	33 050	29 661	97 674
Northern Cape	191	603	1 429	110	3 265	2 313	7 911
Free State	2 456	5 817	4 909	0	11 244	11 321	35 747
KwaZulu-Natal	8 009	16 959	16 367	916	39 998	32 268	114 517
North West	5 710	7 074	8 637	1 648	14 738	10 392	48 199
Gauteng	14 576	13 925	14 494	2 851	30 795	16 839	93 480
Mpumalanga	2 060	4 176	7 035	215	10 567	5 848	29 901
Limpopo	495	8 943	12 768	576	25 822	16 340	64 944
South Africa	45 825	78 194	89 023	8 853	189 404	142 502	553 801
<b>Teaching category percentage within each province</b>							
Western Cape	12.6%	8.3%	15.3%	2.9%	32.4%	28.5%	100.0%
Eastern Cape	4.7%	16.0%	14.3%	0.8%	33.8%	30.4%	100.0%
Northern Cape	2.4%	7.6%	18.1%	1.4%	41.3%	29.2%	100.0%
Free State	6.9%	16.3%	13.7%	0.0%	31.5%	31.7%	100.0%
KwaZulu-Natal	7.0%	14.8%	14.3%	0.8%	34.9%	28.2%	100.0%
North West	11.8%	14.7%	17.9%	3.4%	30.6%	21.6%	100.0%
Gauteng	15.6%	14.9%	15.5%	3.0%	32.9%	18.0%	100.0%
Mpumalanga	6.9%	14.0%	23.5%	0.7%	35.3%	19.6%	100.0%
Limpopo	0.8%	13.8%	19.7%	0.9%	39.8%	25.2%	100.0%
South Africa	8.3%	14.1%	16.1%	1.6%	34.2%	25.7%	100.0%
<b>Provincial percentages within each teaching category</b>							
Western Cape	16.9%	6.5%	10.5%	19.9%	10.5%	12.3%	11.1%
Eastern Cape	10.0%	19.9%	15.7%	8.8%	17.4%	20.8%	17.6%
Northern Cape	0.4%	0.8%	1.6%	1.2%	1.7%	1.6%	1.4%
Free State	5.4%	7.4%	5.5%	0.0%	5.9%	7.9%	6.5%
KwaZulu-Natal	17.5%	21.7%	18.4%	10.3%	21.1%	22.6%	20.7%
North West	12.5%	9.0%	9.7%	18.6%	7.8%	7.3%	8.7%
Gauteng	31.8%	17.8%	16.3%	32.2%	16.3%	11.8%	16.9%
Mpumalanga	4.5%	5.3%	7.9%	2.4%	5.6%	4.1%	5.4%
Limpopo	1.1%	11.4%	14.3%	6.5%	13.6%	11.5%	11.7%
South Africa	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[A]: Teaching professionals: College/University/Higher education institutions

[B]: Teaching professionals: Secondary

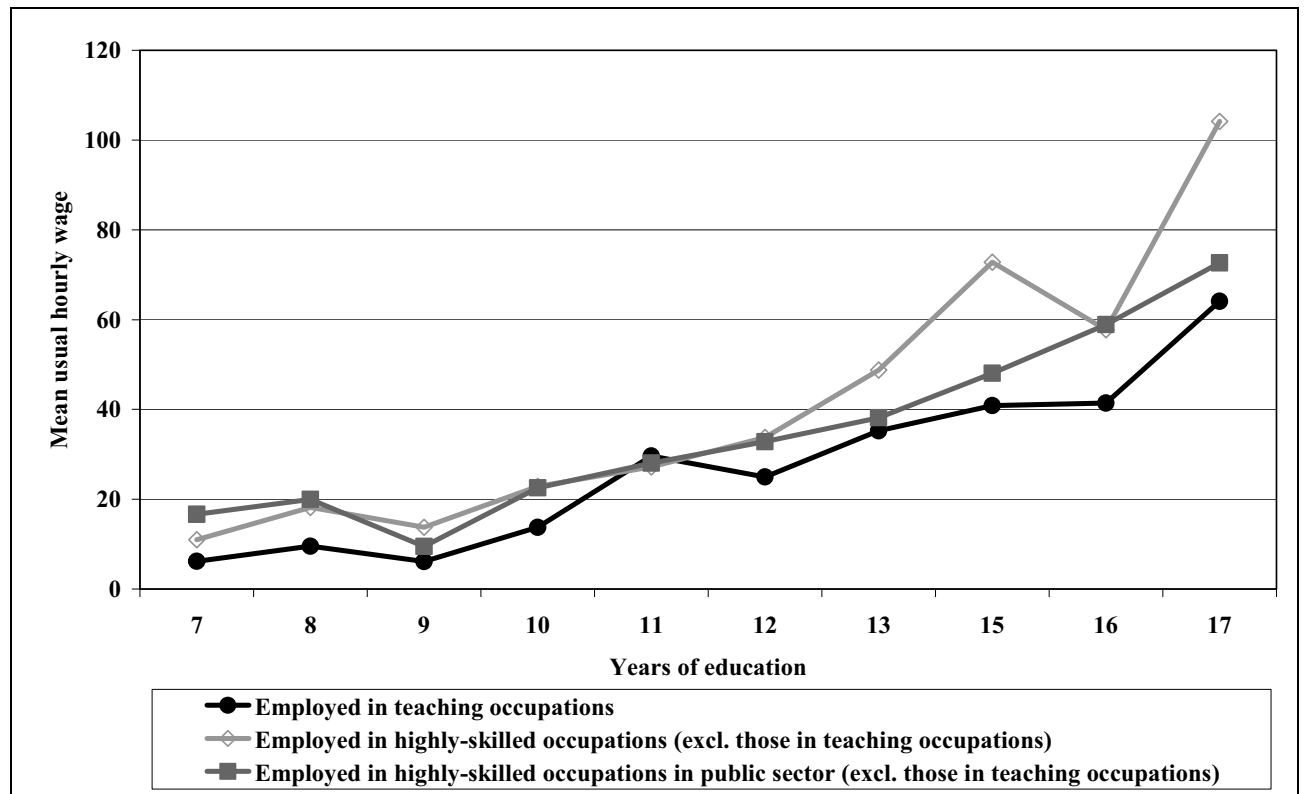
[C]: Teaching professionals: Primary/Pre-primary

[D]: Teaching professionals: Others

[E]: Teaching associate professionals: Primary

[F]: Teaching associate professionals: Others

**Figure 8.2: Mean hourly wage rate of the three groups by years of educational attainment in the Western Cape (Rand, 2000 prices)**



**Figure 8.3: Mean monthly earnings of the three groups by years of educational attainment in the Western Cape (Rand, 2000 prices)**

