

**SYNTHETIC PHONICS AS A TOOL FOR IMPROVING THE READING  
SKILLS OF NIGERIAN PUPILS**

**SYNTHETIC PHONICS AS A TOOL FOR IMPROVING THE READING SKILLS OF NIGERIAN  
PUPILS**

**Olubusola Inyang Eshiet**

**Thesis Submitted for the Degree of  
Doctor of Philosophy**

**PHD in Education and Applied Linguistics**

**NEWCASTLE UNIVERSITY**

**FACULTY OF HUMANITIES AND SOCIAL SCIENCES**

**SCHOOL OF EDUCATION, COMMUNICATION AND LANGUAGE SCIENCES**

**April, 2014**

## **Abstract**

This study explored whether the synthetic phonics method can improve the reading skills of beginning readers in primary schools in Nigeria using a case study action design underpinned by the sociocultural theory of the Zone of Proximal Development (ZPD).

The official policy on education prescribes English as the language of instruction from the fourth year of school up to the highest educational level in Nigeria. However, research shows that by the fourth year of school, pupils are not equipped with sufficient skills in reading the English language. This poor foundation in the language of instruction has the tendency to affect the academic performance of students for much of their school years resulting in increasing rates of illiteracy in the country.

226 pupils, 9 teachers and 9 schools were included in the study which used intervention and control groups. The teachers for the synthetic phonics group were trained. All pupils were pre-tested before teaching began in the classes. The synthetic phonics classes were taught using the intervention method while the control classes were taught using the traditional method. The synthetic phonics classrooms were regularly observed. After the intervention, the groups were post-tested. Focus groups discussions were conducted with the teachers and interviews with pupils in the synthetic phonics groups.

The study found that pupils were more eager to learn in the collaborative and engaging environment offered by the synthetic phonics programme. Also, teachers were more confident to teach English language and they found the synthetic phonics programme very useful and easy to use. Moreover, there was a significant difference in the improvement in the reading skills of the pupils in the synthetic phonics groups compared to the pupils in the control groups. The study concluded that synthetic phonics is a possible tool for improving the reading skills of Nigerian pupils.

## **Dedication**

To the Almighty, invincible, God only wise. He initiated, nurtured, and perfected the vision for this PhD – the Alpha and Omega, my First and Last. He alone keeps hope alive.

## **Acknowledgements**

I was most privileged to have the combination of Professor Steve Walsh and Dr. Pauline Dixon as my supervisors. I am grateful for their guidance; support, ad hoc training, and constructive feedback which helped refine my ideas at the different stages of the work.

I appreciate the feedback I received from Professor Paul Seedhouse and Dr. Scott Windeatt at every Annual Panel. Their thought-provoking questions helped to develop the work further.

I could not have thought of undertaking the PhD if my husband had not been willing to let me go away from home these many years. He not only willingly released me and also provided all the finances needed for the programme, but he was always available to bounce ideas off and to read portions of the work. Eteyenekami, my friend and lover; sosongo o. Obong udiiong.

My appreciation goes to the Director of Education for his support and to all the teachers who participated in the research. They readily took on the task of learning and practicing a new method not minding the time and extra efforts required.

It would have been impossible for me to complete the pilot study if Esther Ikkalume had not been willing to commit time and effort to continue teaching the pupils when I returned to my studies in Newcastle. I am also grateful to the other members of the Hope Alive team: Inem, Ekom, Philo, Yomi, and Mike who assisted in the school tests and were always available for member checking.

My children, Inemesit and Ekomobong, you were most supportive through the four years when 'Mama went back to school'. And when you brought Tomi and Olumide along, they were just in time to check the figures for me! Aidy baby, my faithful companion for the four years; you grew up really quickly and were always there for me. You readily adjusted when the demands of the research meant you needed to move homes at short notice. I 'forgive' you your tantrums!

I thank the UniUyo Jolly Phonics Team, Stepping Stones Nigeria, Hope Alive Foundation for Literacy and Development, and Chris Jolly for their ongoing work on synthetic phonics in Nigeria. They have been a great encouragement.

My thanks go to Naomi Foxcroft and Sue Lloyd for giving me further training in synthetic phonics.

I thank my parents for nurturing in me the love for learning and for hoping that I would do a PhD someday. My siblings did not tire to send daily encouragement and loving support. Our own Dr Kehinde, my ebineyin and senior colleague, you insisted I registered for the PhD. Thanks for your faith. I am most blessed to have you all.

Felix and Yinka Ogele; Jumoke Agbatogun; Joseph and Funmi Akinyemi; and Ayo and Toyin Akin, you helped to make Newcastle home indeed.

I am grateful to Isaac and Philo for making Bonny a delight to return to always and to Lanre and Semeton, and the Adesanyas ('London people') for all the 'Aidysitting' which enabled me pursue the research work with the required focus and for your tender loving care.

I am most grateful to Alaba Agbatogun for his time spent in sharing ideas, comparing notes and for statistics help. I thank Simon Komenta also for the SPSS tutorials.

Thank you, Timi Hyacinth, Ibiba, Effie, Dorine Lugendo, Eby, Ihuoma, and Ihechi, friends off whom I bounced my ideas, who also read the work to check for flow and consistency and to rid it of typos. Alison also, for reading between the lines at the shortest notice to weed off those expressions that are not 'English' enough.

My thanks also go to Caroline and Steve Foreman and to Ma Mary Koshy for their prayer and encouragement. Thanks also to Sally Harding and John Kamara for their sustained interest and words of encouragement.

Robin Humphrey, Laura Leonardo, and Sarah Rylance of HASS postgraduate school, and Linda Kelly, former ECLS Liaison Librarian all contributed to making learning and doing research at Newcastle University more straightforward.

So many others have contributed to the success of this work than I have remembered to mention here. If you do not see your name here, it's most likely because I'm winding down and can't wait to be done with the work. Your contribution is most appreciated.

## Table of Contents

Abstract	iii
Dedication	iv
Acknowledgements	v
Table of Contents	vii
Table of Figures	xv
Table of Tables	xviii
List of Abbreviations	xxi
Chapter One. Introduction	1
1.1 Literacy in Nigeria	1
1.2 How we learnt to read and write	2
1.3 So much ado about reading	3
1.3.1 The Alphabetic system	4
1.4 Literacy as a Social Practice	4
1.5 The immediate research context	7
1.5.1 Accommodation on Bonny Island	8
1.6 Literacy in Nigeria	10
1.6.1 Mother Tongue Literacy	10
1.6.2 The Role of English in Nigeria	10
-----	12
1.7 Which English? Is there a Nigerian variety of English?	14
1.8 The Problem	16
1.8.1 English language results	16
1.9 Teaching reading in Nigerian primary schools	19
1.9.1 English Studies: The Nigerian Curriculum for Primaries One and Two	19

1.9.2 Implementation of the curriculum	21
1.10 The rationale for the research	22
1.11 Aims, objectives, and research questions	23
1.12 My Proposition	24
1.13 Limitations of the study	25
1.14 The organisation of the thesis	25
Chapter Two. Literature Review	26
2.1 Introduction	26
2.2 SLA	26
2.3 How is Reading Learnt?	27
2.3.1 Emergent Literacy	28
2.3.2 The stage theories	29
2.4 The English alphabetic system	32
2.5 Methods of Teaching Reading	33
2.5.1 Whole Word Method	33
2.5.2 The Phonics method	35
2.6 Analytic Phonics	35
2.7 Synthetic Phonics	37
2.7.1 Research in synthetic phonics	42
2.7.2 Criticism by whole word method	52
2.7.3. Criticism by analytic phonics practitioners	52
2.8 Factors in reading achievement	55
2.8.1 Educational and socio-economic background	55
2.8.2 Pupil personal circumstances	56
2.8.3 Teacher circumstances	57
2.8.4 School factors	58
2.9 Theoretical Framework: the Sociocultural Theory	59



2.10 Conclusion	62
Chapter 3. Methodology	63
3.1 Introduction	63
3.2 The research context	63
3.3 Study aim and research questions	64
3.4 Paradigms and the process of research.	64
3.4.1 My researcher stance	66
3.4.2 A Mixed method	66
3.4.3 An intervention	67
3.4.4 Why a mix action research and case study?	67
3.4.5 Action Research	68
3.4.6 Case Study	70
3.5 Criteria for judging quality of research designs: Validity and Reliability	71
3.5.1 Reliability	71
3.5.2 Validity	71
3.5.3 Threats to validity	72
3.5.4 Multiple Sources of evidence	74
3.6 The plan of the case study	78
3.7 The research participants	82
3.7.1 Use of two school management types	82
3.8 Procedure for data collection	83
3.8.1 Teacher Training	83
3.8.2 Pre-tests	84
3.8.3 The Intervention period	85
3.8.4 Learning	87
3.8.5 The Questionnaire	87
3.8.6 Pupil Interviews	88

3.8.7 Teacher Focus group	88
3.8.8 Classroom Observation	89
3.9 Analysis	89
3.9.1 Quantitative data	90
3.9.2 Qualitative data:	91
3.10 The interpretation of the findings	93
3.11 Ethical Considerations	93
3.11.1 Gaining access to participants	94
3.11.2 Informed consent	95
3.11.3 Self-presentation	96
3.11.4 Anonymity and confidentiality	96
3.11.5 Trust	97
3.11.6 Reciprocity	97
3.12 The Pilot Study	99
3.12.1 Introduction: The Choice of Finima	99
3.12.2 The pilot study participants	99
3.12.3 Preparation for the Pilot Study.	99
3.12.4 Starting the Pilot	99
3.12.5 Entry/Intermediate Tests	100
3.12.6 The Learning Period	100
3.12.7 Classroom structure	104
3.12.8 Researchers' learning experience	105
3.12.9 Reflections on action	105
3.12.10 Test results and analysis	106
3.12.11 Lessons from the pilot	107
3.12.12 Post Pilot	108
3.13 Conclusion	109

Chapter Four. How much can synthetic phonics do? A six-month exploration -----	110
4.1 Introduction -----	110
4.2 Research question-----	110
4.3 Findings-----	111
4.3.1 Description of samples-----	111
4.3.2 Background information of all pupils (government and private) -----	116
4.3.3 Descriptive analysis of sample -----	120
4.4 Research question 1 -----	123
4.4.1 Background Information by school management type-----	124
4.4.2 Descriptive statistics of pre- test scores (government schools) -----	132
4.4.3 Private Schools -----	134
4.4.4 Distribution of pupils' scores -----	137
4.5 Descriptive Statistics of Groups' Reading Skills' Pre- and Post-test Scores (Government schools)-----	142
4.6 Was there significant improvement between pre-test and post-test? -----	144
4.6.1 Phoneme awareness -----	144
4.6.2 Blending-----	158
4.6.3 Burt Reading -----	173
4.6.4 Spelling-----	178
4.6.5 Additional sounding exercises to aid spelling -----	189
4.7 Summary of findings-----	198
4.8 Conclusion -----	200
Chapter 5. Effect of Gender and other factors -----	201
5.1 Introduction -----	201
5.2 Effect of Gender on Groups' Performance in Reading Skills-----	202
5.3 Other Factors-----	205
5.3.1 Parent Literacy-----	206

5.3.2 Attendance at private lesson and pupil's previous education -----	207
5.3.3 Availability of reading books at home-----	208
5.3.4 Reading to someone or being read to by someone at home -----	209
5.3.5 Teacher's qualification and years of teaching experience-----	211
5.4 Pupil Attitude-----	214
5.4.1 Pupil Interview-----	215
5.5 Teacher Attitude-----	219
5.6 Teachers' mode of implementation (Actual Use system) -----	222
5.6.1 Participation -----	222
5.6.2 Positive teaching -----	227
5.6.3 Purpose-----	228
5.6.4 Pace -----	229
5.6.5 Passion -----	234
5.7 Differences in teachers' mode of implementation -----	238
5.8 Making room for comprehension -----	239
5.9 The Other classroom -----	242
5.10 What the teachers say about the synthetic phonics method-----	243
5.11 Attitude to Classroom observation -----	248
5.12 Conclusion-----	250
Chapter 6. Discussion-----	252
6.1 Introduction -----	252
6.2 The synthetic phonics teaching method and improved reading skills-----	252
6.3 Comprehension-----	256
6.4 Clarity of guidance and teacher's theory of teaching -----	258
6.5 Pupils-----	260
6.6 Teachers as research partners -----	262
6.7 Effect of Pupils' socioeconomic background -----	263

6.8 Teacher Factor -----	264
6.9 Mission accomplished?-----	264
6.10 Limitations-----	265
6.11 Implications of the findings-----	266
6.12 My PhD Journey-----	267
Chapter 7. Conclusion-----	271
7.1 Introduction -----	271
7.2 The Significance of the Findings-----	271
7.3 Limitations and Suggestions for Future Research-----	273
7.4 Summary and Conclusions -----	274
References-----	278
Appendix A: Miskin’s Phoneme Awareness Test-----	297
Appendix 2: Oral Blending Test -----	298
Appendix C: THE BURT Read-aloud Test: 1974 Revision -----	299
Appendix D -----	300
Appendix E Schonell Spelling test (1952) -----	301
Appendix F: Schonell Convention -----	302
Appendix G: Scheme of work-----	303
Appendix H: Pupil Questionnaire -----	309
About your Family -----	309
Private tuition -----	309
Appendix I: Pupil Interview Guide-----	312
Appendix J: Pre-Intervention FGD-----	313
Appendix K: Post Intervention FGD -----	314
Appendix L: Classroom observation Checklist -----	315
Appendix M: Pilot Pupils’ letters-----	317
Appendix O: Classroom Observation/Focus Group Transcription Convention-----	319

Appendix P: Thank You Card-----	321
Appendix Q: Consent Form -----	322
Appendix W: Parent Opt-Out form-----	323
Appendix X: School Visit Record -----	324

## Table of Figures

Figure 1.1: The Linguistic Landscape of Nigeria.....	12
Figure 1.2: Examination results ( <i>Source: Adekola, 2007</i> ) .....	17
Figure 1.3: Examination results 2 ( <i>Source: Nigeria Education Sector Diagnosis, 2003</i> ) ....	17
Figure 3.4: The plan of the case study .....	79
Figure 3.5: Technology Acceptance Model ( <i>Source: Venkateshet al 2003, p.423</i> ) .....	92
Figure 3.6 The daily teaching routine .....	102
Figure 4. 7: Mother literacy .....	124
Figure 4.8: Father Literacy .....	125
Figure 4.9: Private lessons .....	125
Figure 4.10: Pupils have reading books at home.....	126
Figure 4.11: Pupil reads aloud to someone at home.....	127
Figure 4. 12: Mother is literate .....	128
Figure 4.13: Private lessons .....	129
Figure 4.14: Pupils have reading books at home.....	130
Figure 4.15: Someone reads to the pupils at home .....	130
Figure 4.16: Pupil read aloud to someone at home .....	131
Figure 4.17: Distribution of Groups' Phoneme Awareness Pre-test Scores (government schools) .....	133
Figure 4.18: Distribution of Groups' Phoneme Awareness Pre-test Scores (Private schools) .....	136
Figure 4.19: Distribution of Groups' Blending Pre-test Scores.....	136
Figure 4.20 Teacher introducing the sound 'w' .....	148
Figure 4.21: Teacher doing action for 'ng' .....	148
Figure 4.22: Teacher points at 'm'      Figure 4.23: Pupil does 'm' action .....	150
Figure 4.24: Teacher writes caterpillar 'c' .....	151
Figure 4.25: Teacher completes writing 'g' .....	152
Figure 4.26: Teacher writes 'ng'      Figure 4.27: Pupil jumps up .....	153
Figure 4.28: Pupil writes 'ng'      Figure 4.29: All Clap .....	153
Figure 4.30: Writing on friend's backs .....	154
Figure 4. 31: Writing in the air .....	154
Figure 4.32: Teacher looking puzzle .....	160

Figure 4.33: Distressed pupils .....	161
Figure 4.34: Pupils clap joyfully .....	162
Figure 4.35: Teacher writes 'i' .....	165
Figure 4.36: Teacher signals .....	165
Figure 4.37: Every pupil on the right page.....	166
Figure 4.38: Teacher points at 'g' .....	167
Figure 4.39: Teacher points at 'e' .....	167
Figure 4.40: Teacher points at 't' .....	167
Figure 4.41: Blending on the arm .....	170
Figure 4.42: Teachers touches 'g' .....	170
Figure 4.43: Teacher points at 'get' .....	171
Figure 4.44: Blending in the workbook.....	172
Figure 4.45: Give me this very loud .....	177
Figure 4.46: Drag these three together .....	177
Figure 4.47: Teacher points at pupil at the back .....	182
Figure 4.48: Correct answer .....	182
Figure 4.49: Pupil counts sounds .....	183
Figure 4.50: All Motivated to answer .....	184
Figure 51: Teacher selects a pupil .....	184
Figure 4.52: Teacher selects another pupil.....	184
Figure 4.53: No instruction to Clap? .....	184
Figure 4.54 Pupil seriously counting the sounds on her fingers.....	185
Figure 4.55: Teacher demonstrates bang .....	187
Figure 4.56: 'I said 'wing' .....	188
Figure 4.57: Teacher repeats action for 'ng' .....	188
Figure 4.58: Show of fingers for 'hang' .....	189
Figure 4.59: Thumbs up .....	190
Figure 4.60: Thumbs down .....	190
Figure 4.61: arms at your back .....	192
Figure 4.62: All show your fingers .....	192
Figure 4.63: Teacher attempts to cover the board with her body .....	193
Figure 4.64: Four sounds in 'went' .....	194
Figure 4.65 .....	196
Figure 5.66: Happy pupil .....	216
Figure 5.67 Pupil ran from the back .....	216
Figure 5.68: Pupil runs towards the teacher .....	216
Figure 5.69: Pupil right in front.....	217
Figure 5.70: 'r' with action .....	217
Figure 5.71 : 'n' with action .....	218
Figure 5.72: Click your castanet .....	218



Figure 5.73: Partner work .....	218
Figure 5.74: 'I'm not sure of this'     Figure 5.75: 'We need you teacher' .....	223
Figure 5.76: 'Let's move on, we can't get the teacher' .....	223
Figure 5.77 : Is this 'k'?     Figure 5.78: No, it's not 'k' .....	224
Figure 5.79: Displeased .....	224
Figure 5.80: Happy teacher.....	225
Figure 5.81: Wrong answer     Figure 5.82: Pupil eager to answer again.....	228
Figure 5.83: A pat on your back .....	228
Figure 5.84: Teacher writes 'web'     Figure 5.85: it says 'd' .....	230
Figure 5.86: It says 'b' .....	230
Figure 5.87: Give me 'w' very loud .....	232
Figure 5.88: Give me the 3 sounds together .....	232
Figure 5.89: Inaudible     Figure 5.90: Pupil makes to sit down .....	234
Figure 5.91: Pupils stands up again     Figure 5.92: Teacher moves on to another pupil	234
Figure 5.93: Pupils listening attentively to a story .....	235
Figure 5.94: Teacher joins in doing the action.....	236
Figure 5.95: Teacher demonstrates length as meant by the word 'long' .....	237
Figure 5.96: Teacher l ung     Figure 5.97: (Pupil) l ung.....	237
Figure 5.98: They heard what?     Figure 5.99: Do you know what this is? .....	241
Figure 5.100: Researcher whispers to the teacher .....	250

## Table of Tables

Table 2.1: Some studies in synthetic phonics .....	51
Table 3. 2: Multiple sources of evidence .....	75
Table 3.3 Units of analysis .....	81
Table 3.4: Outline of the pilot from pre-test to post-test .....	101
Table 3.5: Pretest and Posttest reading age in months.....	106
Table 3.6: Reading age gain in months .....	107
Table 3.7: Gain in reading age in Months .....	107
Table 4.8: School and teacher vignette summarised .....	114
Table 4.9: Age of pupils.....	115
Table 4.10: Pupil’s mother is literate .....	116
Table 4. 11: Pupil’s father is literate .....	117
Table 4. 12: pupil has private lessons after school.....	117
Table 4. 13: Pupil had previous education .....	118
Table 4. 14: Pupil has reading books at home.....	118
Table 4. 15: Someone reads to the pupil at home .....	119
Table 4. 16: Pupil reads aloud to someone at home .....	119
Table 4. 17: Descriptive statistics for the sample .....	120
Table 4. 18: Group Statistics Independent Sample T-Test of both groups.....	122
Table 4.19: Descriptive Statistics of Pupils’ Pre-test Reading Skills’ Scores by Group (Government).....	132
Table 4.20: Descriptive Statistics of Pupils’ Pre-test Reading Skills’ Scores by Group ....	135
Table 4.21: Shapiro-Wilk Test of Normality on schools’ Pre-test Scores (government schools) .....	138
Table 4.22: Shapiro-Wilk Test of Normality on Groups’ Pre-test Scores (Private schools) .....	139
Table 4.23: Levene’s Test of Homogeneity of Variances (government school) .....	140
Table 4.24: Levene’s Test of Homogeneity of Variances (private schools) .....	140
Table 4.25: Descriptive Statistics of the Government School’s Reading Skills’ Pre-test and Post-test Scores .....	142
Table 4.26: Descriptive Statistics of the Control Group’s Reading Skills’ Pre-test and Post-test Scores (private schools) .....	143
Table 4.27: Wilcoxon Signed-rank test for Phoneme awareness (Government school).	144

Table 4.28: Wilcoxon Signed-rank test for Phoneme awareness (Private schools) .....	145
Table 4.29: Mann-Whitney U test for Synthetic and Control Groups' Post-test Performance Scores in Phoneme awareness (government schools) .....	155
Table 4.30: Mann-Whitney U test for Synthetic and Control Groups' Post-test Performance Scores in Phoneme awareness (private schools).....	156
Table 4.31: Wilcoxon Signed-rank test for Blending .....	162
Table 4.32: Wilcoxon Signed-rank test for Blending (Private schools).....	163
Table 4.33: Mann-Whitney U test for Synthetic and Control Groups' Post-test Performance Scores in Blending (government schools).....	172
Table 4.34: Mann-Whitney U test for Synthetic and Control Groups' Post-test Performance Scores in Blending (private schools) .....	173
Table 4.35: Wilcoxon Signed-rank test for Burt reading (Government schools).....	173
Table 4.36: Wilcoxon Signed-rank test for Burt reading (Private Schools) .....	174
Table 4.37: Mann-Whitney U Test for Synthetic and Control Groups' Post-test Performance Scores in Burt reading (government schools).....	175
Table 4.38: Mann-Whitney U Test for Synthetic and Control Groups' Post-test Performance Scores in Burt reading (private schools) .....	175
Table 4.39: Wilcoxon Signed-rank test for Schonell spelling (Government Schools).....	178
Table 4.40: Wilcoxon Signed-rank test for Schonell spelling (private schools).....	178
Table 4.41: Mann-Whitney U Test for Synthetic and Control Groups' Post-test Performance Scores in spelling (government schools).....	180
Table 4.42: Mann-Whitney U Test for Synthetic and Control Groups' Post-test Performance Scores in Schonell Spelling (Private schools) .....	180
Table 5.43: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Phoneme awareness and blending (government schools) .....	202
Table 5.44: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Burt Reading and Schonell Spelling by Gender (government schools).....	203
Table 5.45: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Phoneme Awareness and Blending by Gender (private schools) .....	204
Table 5.46: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Burt Reading and Schonell Spelling by Gender (private schools) .....	204
Table 5.47: Reading at home (Government school).....	210
Table 5.48: Teacher has English qualification (Government schools).....	212

Table 5.49: Teacher has English qualification (Private schools) .....	213
Table 5.50: Teachers' years of experience (Private schools).....	214

## **List of Abbreviations**

AM:	Acquisition Metaphor
BERA:	British Educational Research Association
CD:	Compact Disk
CVC:	Consonant-Vowel-Consonant
EGRA:	Early Grade Reading Assessment
ELL:	English Language Learner
FGD:	Focus Group Discussion
JP:	Jolly Phonics
KG:	Kindergarten
L1:	First Language
L2:	Second Language
LAD:	Language Acquisition Device
NCE:	National Certificate of Education
NLNG:	Nigeria Liquefied Natural Gas
OECD:	Organisation for Economic Co-operation and Development
PM:	Participation Metaphor
RA:	Residential area
SLA:	Second Language Acquisition
SSCE:	Senior Secondary Certificate Examination
S1G:	School One Government
S2G:	School Two Government
S3P:	School Three Private

S4P	School Four Private
S5P	School Five Private
UBEC:	Universal Basic Education Commission
UG:	Universal Grammar
UK:	United Kingdom
UNESCO:	United Nations Educational Scientific and Cultural Organisation
UNICEF:	United Nations Children's Fund
US:	United States
ZPD:	Zone of Proximal Development

## **Chapter One. Introduction**

### **1.1 Literacy in Nigeria**

Statistics show that the literacy rate of Nigerians is dwindling almost on a daily basis. Newspaper reports, national news reports, online reports, literacy conference and workshop reports all resonate with this one theme: growing illiteracy rates in Nigeria. Local and international policy makers and watchdogs are not left behind in the observation of this very disturbing trend. The figures and percentages for illiteracy rates in Nigeria have been estimated at 25 million; 45 million; 45% by different studies (Adeola, 2012; Igwe 2010; UNESCO 2012). University Vice chancellors echo that the illiteracy rate in Nigeria is high and veteran teachers reiterate the fact that education is in a bad state in Nigeria (Jowitt, 2009). Most importantly, Nigeria is listed as one of the African countries that will not achieve the Education for All goals by 2015 (UNESCO 2012).

I listen to employers groan that graduates are neither able to fill basic forms nor to write meeting reports. When I relate with teenagers who can barely write their names and for whom reading half a page of a book is almost an impossible task, I wonder how and when the literacy level deteriorated to this extent. However, with the worrying about the how and the when, came the thought: what can anyone do about this?

More recently, in the course of my pursuit of a PhD in Literacy (Education and Applied Linguistics), I have witnessed Nigeria dropping from the list of countries whose citizens were not required to write English qualifying tests in order to be eligible to study in the United Kingdom. Nigerians must now write an English test before being given unconditional admission for post graduate studies in the United Kingdom and this for a country whose formal education system, governance and all other official matters are conducted with English as the only recognised official language. In fact, in the 4<sup>th</sup> year of this PhD programme, I was made to write an English test in order to be eligible for continuation of my studies. While this may seem odd, and even bothersome, I quickly came to terms with the humbling fact that everywhere in the world, the news is: Nigeria is an illiterate country. Moreover, I have often interacted with graduates who cannot write five error free sentences. How could I then be irritated with a policy that says

Nigerians need to prove they can read and write in English in order to be eligible for admission into international schools?

## **1.2 How we learnt to read and write**

Reading involves recovering the linguistic units of language. These units may be phonemes, in an alphabetic system; syllables in a syllabic writing system, and morphemes in a logographic writing system (Treiman and Kessler, 2011). Learning to read entails the knowledge that writing represents language and that written words are systematically linked to spoken words. In an alphabetic writing system like English, the link is at the level of phonemes (Treiman and Kessler, 2013).

The definition above incidentally bears a semblance with the responses that many older people (35-70 years) I interviewed gave about their early learning and reading experiences.

I obviously did not include the more recent generation (under 35 years) because they may not have a history of deterioration of educational standards. When I compared the accounts of the people I spoke to with my own experience of learning to read, they bore several similarities. These were not accounts given by literacy experts but by ordinary people who learnt to read at some point in the Nigerian school system. I can give a summary thus:

School started with little or no knowledge of reading and writing; at best, a person was able to recite the alphabet either in English or in the local language. At school, instruction was in the native language and English was taught as a subject. Reading instruction in the native language progressed in earnest with learning the alphabet. Incidentally, the vowel alphabets as taught were similar to the sounds of the language and the consonants also were close to how they are sounded. Learning the alphabet was also coupled with joining the letters to form smaller segments, then words. For example, for the Yoruba speaker like me, it would be:

a b d e ẹ f g gb hi j k l m n o ọ p r s ẹ t u w y

This would be accompanied by learning the vowels

a e ẹ i o ọ u



Next would be learning how to join the letters/sounds together to form words. Learning of the vowels would typically be followed by

ba be be bi bo bō bu

da de de di do dō du

fa fe fe fi fo fō fu

ga ge ge gi go gō gu

At some point, the language the learners read and wrote in changed to English. And they became happy readers forever

### **1.3 So much ado about reading**

Literacy has become closely associated with modern civilisation (Blake and Blake, 2005). Thus reading has become a very important skill as a result of the “literacy revolution brought about by great increase in knowledge and by the efficiency of the media to convey it” (Chall 1996a, p.3). Such high increase in knowledge and in the avenues of communicating it requires that many more people be literate. “The invention of paper, the printing press, and the substitution of wood pulp for rags in paper manufacture were both cause and effect of an expanding literacy” (Clifford 1984, p.472). As texts were produced in increasing numbers; so did the need for reading increase.

Reading and writing are said to have been started some six thousand years ago by Sumerian scribes (Harrison 2004). The first known form of writing was pictorial, where symbols were used to represent things. Pictorial writing gave way to phonetic/alphabetic writing where symbols were used to represent sounds. Alphabetic writing evolved from the Mesopotamian cuneiform script during the period about 2000 BC, developed by the Phoenicians and spread all over the Mediterranean.

The technology of writing was specifically developed for the purpose of commerce and law. Though originally developed for trade, the technology has now become adapted to other purposes of communication (Ashby and Rayner 2006).

In more recent times, three types of writing systems have become distinguishable: logographic, syllabic and alphabetic (Blake and Blake, 2005). The logographic system uses signs to denote whole words, the syllabic system uses signs to represent syllables and the

alphabetic system uses letters of an alphabet to signify meaningful sounds in a language (Blake and Blake, 2005). English uses the alphabetic system hence the focus on the alphabetic system in this section.

### ***1.3.1 The Alphabetic system***

An alphabetic system is a highly refined system where all words of all languages can be transcribed unlike the other systems. As a result, alphabetic systems require that the sounds of a language be given great attention. The alphabetic method was wide spread, made popular by the 'hornbook' about the late 14th century, and remained popular for more than 500 years (Beard, 1990). The hornbook was "a sheet of parchment, fastened to a wooden 'fence', protected by a thin sheet of horn" (Beard 1990, p. 72). The writing on it included the alphabets in both upper and lower case.

It was adopted by the Greeks in 1000 B.C. and is the basis for the current alphabetic systems including English (Harrison 2004, Calfee and Drum 2006). Alphabetic writing is more accessible and empowers those skilled in it to write new words as well as to read any word thereby making reading and writing easier. In order to read and write in English, a pupil must learn the alphabetic writing system (Erhi and Roberts, 2006). Writing, therefore, brought about the need for reading and reading, a need which motivated people to develop better ways of writing. All these happened because of the increasing need in human societies for communication. The need for communication through writing resulted in the need to teach reading and writing. One can only make sense of the written form by learning to read.

There is a gap between text and reader (Harrison 2004), and a wider gap between writer and reader. Reading can indeed be described as communication between unseen participants (Goodman 1982). Since texts are written for the purpose of communication, the gap between the writer of the text and the audience for whom it is intended can be bridged only if such audience is skilled in reading. This is why it is important to teach pupils how to read and understand texts.

### **1.4 Literacy as a Social Practice**

Scholars have differentiated between two types of literacy programmes: linguistic and sociolinguistic (Al-Kahtany 1996). The linguistic programme results from a linguistic perspective of literacy which "perceives the acquisition of literacy as independent of any

social factors ...” (Al-Kahtany 1996, p.549). Such approach to literacy acquisition views literacy merely as a result of the ability of the human intelligence to understand abstract concepts. This view of literacy has been the object of criticism and it is said that the proponents imagine that a person’s mind becomes literate just by acquiring the ability to use an alphabet system. This means that as soon as a person is skilled in an alphabet system and can code and decode, s/he moves from oral to literate thinking. Literacy has ceased to be defined as just the ability to read and write, and to understand information and to express concrete and abstract ideas. The simple definition of literacy as the acquisition of a set of skills has since been replaced by a more robust view of literacy. Literacy has been described as “a set of social practices” (Barton and Hamilton 2003, p.8). This is because literacy is connected to other aspects of life. It is an activity that goes on in everyday life. The different cultural ways in which literacy is used are often referred to as literacy practice while composing the text is described as a literacy event (Pahl and Rowsell 2012).

There seems to be a consensus that different domains of life require different literacies (Gee 1999; Heath 1986; Ong 2002; Pahl and Rowsell 2012). Some literacies that have been identified include: film literacy, computer literacy, agricultural literacy, cooking literacy, etc. The way people understand literacy influences their learning (Barton and Hamilton 2003).

It has been rightly argued that attaining fluency at decoding the text is not enough to meet the needs of the present-day world (Stevens and Beans, 2007). This process of reading the world makes use of the mass-media and the Internet. The fact that one is a fluent reader of text does not contribute much to gaining speed and effectiveness at doing internet search and establishing validity of information. Literacy skills must include the ability to read and understand text and also to engage with and to critique text. Literacy can be viewed as the process of making meaning which facilitates word reading and also an understanding of the world (Freire, 2007). Literacy practice therefore can serve as tools for enablement or subjugation (Stevens and Beans, 2007). Literacy could be a serve as a tool of liberation and empowerment for those who ordinarily are perceived to be powerless (Freire, 2007). The combination of the view of literacy as a set of skills with the understanding of daily usage of literacy brings about a more balanced view of literacy. Literacy practices are influenced by sociocultural expectations and power relationships (Freire, 2007). The more visible and dominant types of literacy

in each society are dependent not only on the aforementioned but also on the history of the specific society. In the Nigerian society for example, the functional view of literacy as the ability to read and write and to acquire skills like computer literacy is still very highly regarded and parents often feel that this skill is the foundational skill they could equip their child with (Danladi, 2013). To the average Nigerian, being educated is very important and education is largely equated to studying in school (Kamaldeen, Buhari, and Parakoyi, 2012).

The importance of reading to the Nigerian child is expressed by several Nigerian authors and researchers as summarised in some quotes below:

“Reading is power!

Read a book today!

Reading maketh a man!

Teach a child to read ---- and you have made a king!”

Reading Association of Nigeria and International Reading Association cited in Igwe (2011, p.1).

Ilogho (2012, p.1) complains that “the rising population of reluctant readers in this age of information explosion is disturbing”. And proceeds to say that the reading state of the Nigerian society is ‘pathetic’.

Aina, Ogungbemi, and Adigun, (2011, p.1) state: “Reading stimulates imagination, encourages quick learning, and expands horizons. It encourages imagination and curiosity. Reading enhances acquisition of skills for handling complex ideas or issues.” Reading has been tipped as the underpinning factor for pleasure as well as work, for promotion at work, ability to receive and convey digital and written information. They further insist that ‘the ability to read well is absolutely critical to success in life.’

Eshiet (2010) asserts that Literacy [reading ability] is key to all-round development.

From the foregoing, it is easy to conclude that reading, in whatever form, pleasure or serious engagement, is highly valued skill in the Nigerian society. At the very basic level, ability to read and write is equated to being literate. Although recognition is accorded to literacy in the social context, the primary reference to literacy is to the ability to read and write. When a question is asked about if someone is literate or not, the answer

depicts whether the individual is able to read and write. As such, to the Nigerian family, the ability to read broadens the horizons of people, young and old as it increases their opportunity to participate in what goes on in the world around them, learning from others and making their own contributions. Learning to read holds the key to new possibilities and opportunities. It could provide children and adults alike a link to a wide variety of experiences which would have been otherwise impossible. Literacy is fundamental to a successful existence in today's world (Anyachebelu, Anyamene, Adebola; Britto et al., 2006; Edem, Mbaba, Udosen and Enang 2011; Eshiet 2010).

The ability to read is a confidence booster. Children, even adults, are more confident in their ability to face life's situations if they can read. Such understanding must have prompted Flaubert's 1857 writing (quoted in Harrison (2004, p.3) "... read in order to live." According to Harrison, "we have a moral duty to read, and, therefore as teachers, a moral duty to teach reading" (ibid, p.6). Pupils will be more confident in carrying on day-to-day academic activities when they are able to read. It is widely believed that literacy advancement would boost the socio-economic growth of developing countries and it has even been estimated that in addition to other socio economic factors, a sizable percentage of adult literacy is a requirement for economic development (Paran, 2007). For any country to stay in tune with the present technological age, a sizable part of its population must be literate (Dickinson, McCabe and Essex 2006). It is even said that ability to read could lead to a reduction in the crime rate (Edem, Mbaba, Udosen and Enang 2011; Harrison, 2004). From the foregoing, it can be concluded that teaching the Nigerian child to read and write is viewed as equipping them with a highly valued skill.

### **1.5 The immediate research context**

Nigeria is a multilingual country which boasts of up to 600 indigenous languages (Danladi, 2013). In spite of the wealth of indigenous languages, English is the language of formal instruction in Nigerian schools even though it is not so stated in the constitution. English language remains dominant not only in education but in all spheres of the country's existence. It is the language in which governance is executed at the federal government level. Government papers and guidance are issued first in English and only translated into some of the Nigerian languages when deemed necessary.

The specific location of this research is Bonny Island which is situated at the southern edge of Rivers state in the Niger Delta area of Nigeria. It is approximately one hour from Port Harcourt City by boat. Bonny Island is made up of Bonny and Finima towns and several other small villages. The local language is Ibani but the area has become multilingual and multicultural by virtue of oil exploration activities which brought to the region people from different cultures, languages and backgrounds. As such, in addition to Ibani, other Nigerian languages that are spoken on the Island include: Ogoni, Obolo, Ibibio, Pidgin English, Hausa, Yoruba, and Igbo. Other settlements in the Bonny local government include Abalamabie, Dan Jumbo, Agaja, Oloma, Lighthouse and Green's Iwoama. Such settlements engage in fishing as their major source of income and supply fish and other sea creatures to the entire island.

The indigenous community consists of people of mixed economic circumstances; some are gainfully employed in the oil and gas companies<sup>1</sup> or in contractor companies<sup>2</sup> servicing the bigger oil and gas companies. Others own their private businesses. There are also those who have relocated to the community from other parts of the country in the hope of finding employment in the oil and gas companies located there. Several people who belong to the latter group wait for occasional jobs on project sites. Many in this latter category however, discover that employment opportunities are not as readily available as they had hoped and therefore settle for whatever casual job opportunities are available.

Since employment opportunities are lean, and a good number of the population is unemployed or in casual employment, a majority of the population is in the low income bracket. Many are engaged in petty trading which some do from their home, by the roadside or at market stalls. School age children are often seen after school selling wares on the streets or helping their parents sell in market stalls.

### ***1.5.1 Accommodation on Bonny Island***

**NLNG** provides a Residential Area for their staff popularly known as the RA. For security reasons, the RA is fenced off the neighbouring towns of Bonny and Finima.

---

<sup>1</sup> Prominent among these are Nigeria Liquefied Natural Gas (NLNG), Shell Petroleum, and Agip Oil Company

<sup>2</sup> Julius Berger, etc.

**Finima** is a resettlement town for people who were displaced by the construction work that was carried out at the inception of the NLNG in 1990. At the time the town was built, buildings were made of bricks and there was planned layout of areas. The buildings had sufficient spaces in between them. There are (and are still) parking lots and good roads, all evidence of a well-planned living community. However, the good intention of the 'city planners' has since been ruined. This is largely because many more people than planned for have come to settle on the island. Also, the original natives of the island would rarely sell their lands to the foreigners who came to settle on the island. The natives would give out the land on short leases. By this system, when the tenant built the house, the cost of the building would be calculated and converted to rent<sup>3</sup>. Due to this unfortunate predicament, most tenants would resort to building with the cheapest materials available rather than build good and secure structures. Many shanties have therefore arisen, sufficient to cause the original brick structures to pale into insignificance. Houses have been built with different types of unimaginable materials. In some cases, street demarcations have disappeared and houses and shops are built very close to the roads. Whole families live in single rooms in multi-room houses some of which have no window or any form of ventilation. Several occupants of these houses share restrooms where such are available while and in some cases, people have to walk long distances before they can access a restroom. A good part of Finima town can be said to live in squalor.

**Bonny town** is an old town with more settled houses and although it is not completely free of shanties, it is better planned than Finima.

The choice of Bonny Island for this research was partly because it has features of both rural and urban settings and so was able to provide data that reflected both types of communities. In addition, it was a convenient location as I had my home there and hoped that that would facilitate gaining access to the research participants.

---

<sup>3</sup> This means that when the tenant has lived in the house for the number of years which covers the cost of building, the tenant, who built the house, begins to pay rent and the ownership of the house reverts to the owner of the land.

## **1.6 Literacy in Nigeria**

### ***1.6.1 Mother Tongue Literacy***

A vast amount of research supports the fact that the use of English in education poses an obstacle to fluent literacy for most Nigerian learners (Abe 1991; Bamgbose 1991; Paran and Williams 2007). Researchers have concluded that pupils who are taught in their home language are more likely to succeed than those taught in a language they encounter for the first time as they enter the classroom. They also attain more in reading tests than those taught in a language that is strange to them. One major reason for this is that they already understand the language and as such do not need to struggle with comprehension as much as they would when taught with a strange language. Learning to read in one's L1 or in a language one already speaks is obviously easier to achieve than learning to read in a new language. In learning to read in an L2, one has to learn the vocabulary items as well as learn how to read.

Other reasons given for the superiority of the L1 in the teaching of literacy include educational, sociological and psychological. Because a person's mind has been schooled to understand reality through the L1, learning to read will be easier using the L1. Sociologically, the mother tongue represents fond memories and home emotions (Fafunwa, 1976). Research shows that literacy in one's L1 facilitates acquisition of literacy in subsequent languages (Fafunwa 1976; Okedara and Okedara 1992). Some UNICEF funded studies also found that children who were taught in their native languages demonstrated evidence of being confident and showed great enthusiasm for learning even an additional language, in this case, English (Adekola, 2007). Learning in a known language also agrees with the teaching philosophy of moving from the known to the unknown (Al-Kahtany, 1996).

### ***1.6.2 The Role of English in Nigeria***

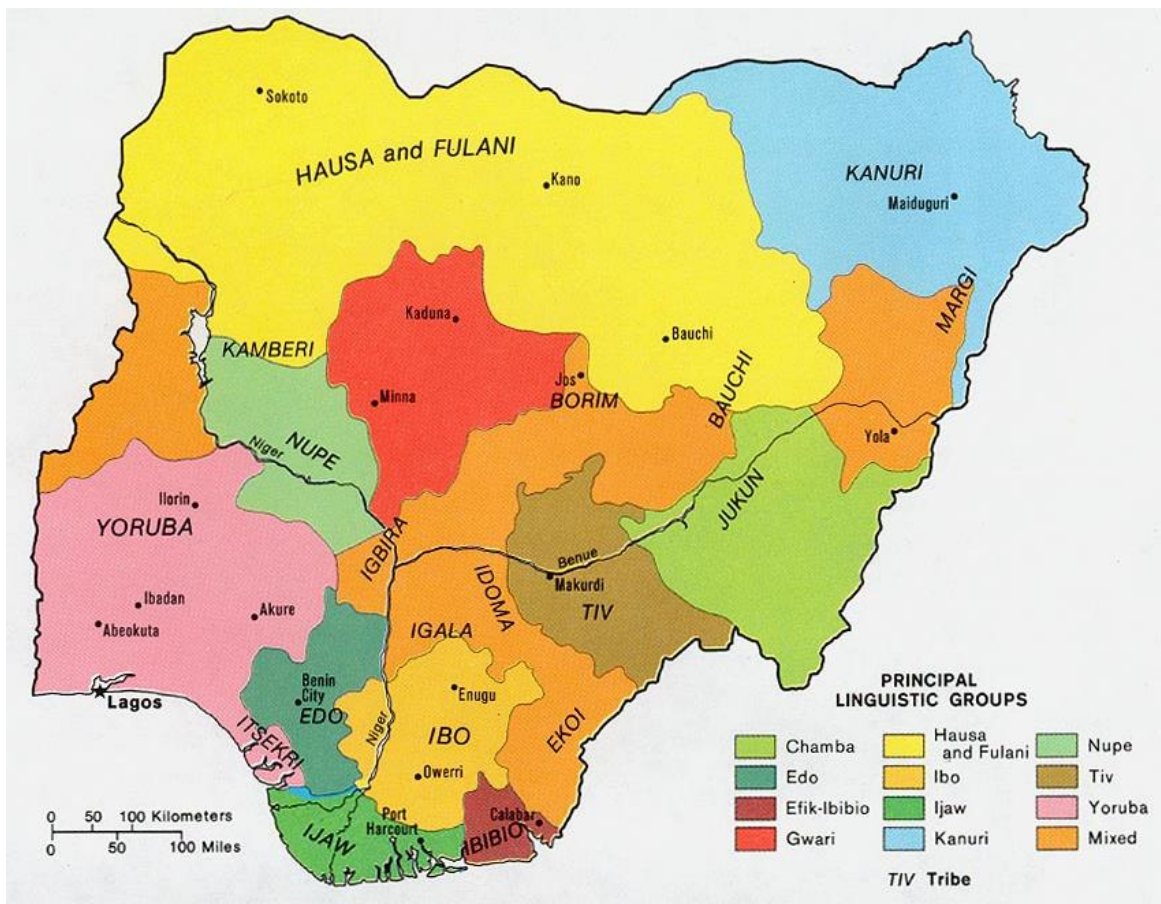
In spite of the seemingly obvious superiority of teaching literacy in a language the pupils already speak, other factors; social, economic, or political, often determine the language in which the pupils are expected to be literate (Al-Kahtany, 1996). For most African languages, the opportunity to develop was frozen by colonialism which brought in its wings the use of the language of the colonial masters (Paran and Williams, 2007). This resulted in a lack of published materials in the native languages leading to inability of people to read and write in their mother tongue.



In the case of Nigeria, the supremacy of English as the language of instruction dates back to her colonial era. The British colonial powers invested in the development of the indigenous languages for various reasons. However, under the influence of the Phelps-Stokes report (1922), and other committees in subsequent years, (between 1925 and 1943) the indigenous languages were reduced to being used only in early primary school, while English, “the language of the European nation in control” (Okedara and Okedara, 1992 p.95), was to be used for the senior classes. This situation continued for the entire period of British rule in Nigeria and beyond. Even when the National Policy on Education was revised in 1981, the use of the indigenous languages was restricted to the lower primary level, while at a later stage, that is, upper classes of primary school, the language of instruction was English. The National Policy on Education states:

“The medium of instruction shall be the language of the environment for the first three years. During this period, English shall be taught as a subject. From the fourth year, English shall progressively be used as a medium of instruction and the language of the immediate environment and French shall be taught as subjects” (National Policy on Education, 2004, p.16).

It would be expected that part of the gains of Independence should be the promotion of the use of indigenous languages in education as this would make learning easier for the pupils. However, “this principle is often forgone in the world of realpolitik where the non-social implications of linguistic literacy programs are more attractive and less disturbing” (Al-Kahtany1996, p.554). English is obviously a less disturbing option for Nigeria, a nation of approximately 167 million people (National Population Commission, 2012) and about 600 different languages (Paul, 2013).



**Figure 1.1: The Linguistic Landscape of Nigeria**

The Hausa speaking people of the North constitute 29% of the number, the Yoruba in the West, 21%, in the East, the Igbo constitute 18%. These three are referred to as the major languages of Nigeria. The remaining over 600 languages are spoken by smaller groups, hence they are called minority languages Paul (2013).

How many of these languages could the government possibly use as languages of instruction in the classrooms, and which of them could be adopted as official languages? The adoption of one or some of the languages as official languages could only lead to unwelcome situations such as intertribal disputes, to say the least. In the face of the concern for unification and the perceived need to avert friction between language groups, English became the preferred option (Paran and Williams, 2007). English is the language of government, commerce, law, the media, and it is the language of education, the language of instruction for all school subjects, except when a native language is taught as a school subject. This situation, carried forward from the days of colonial rule (Bambgose 1971; Crystal 2003; Spencer 1971), remains so today as none of the Nigerian languages has assumed the place of an official language.

It is therefore important that pupils learn to read and write English and that as early as possible so as to integrate well with the educational and social systems of the country (Crystal 2003). English is often said to be the official language in Nigeria even though this is not officially stated in the constitution (Bamgbose, 1991). It is inconceivable that a student who cannot read English can be successful in their academic pursuits (Ekpo et al 2007).

Apart from the fact that English is so entrenched in the Nigerian education policy, there are other reasons worth mentioning why the Nigerian pupils should be taught the Standard English. One of such reasons is that when educated Nigerians of different language background meet officially or even in less formal situations, the default language they tend to speak is English (Akinmade and Salami, 2010). Although the Nigerian Pidgin English is spoken by people across different societal strata, its status within the Nigerian society yet appears unsure (Akinmade and Salami 2010) with people tending to use it only when it is necessary. Preference is shown for Standard English. Nigerian Pidgin English has not been favoured with attention from government and as such, its social standing can be said to be weak when compared to the Standard English (Akinmade and Salami 2010). For this reason, the need to teach pupils English remains a strong one.

Also, because of a decline in the quality of education, and perennial strike actions which means that 4 year course could sometimes stretch by another 2-3 years (Madichie and Madichie; 2013; Olupona, 2013), Nigerian students prefer to study overseas. This has led to an influx of Nigerian students into oversea institutes of higher education. A 2011 report indicates that Nigeria has become one of the top countries who send students to Canada.

In the academic session 2011/2012, there were 17,585 Nigerian students in the UK and the numbers were expected to increase to 30,000 in the year 2015. This will be about 7% of total student population (Stewart, 2012). Nigeria is said to be the 3<sup>rd</sup> largest non EU contributing country to student population in the UK (Stewart, 2012). A sound knowledge of English is a prerequisite to gaining admission into institutions of higher learning in most of the countries that Nigerians seek admission into.

Another reason why Nigerian pupils should be taught English is because on the average, Nigerians are known to be great travellers, travelling for tourism and business (Duke, 2013).

This peculiar situations highlighted above shows the overarching importance of English for the Nigerian child.

### **1.7 Which English? Is there a Nigerian variety of English?**

Granted that there is need for the Nigerian child to be taught English early in life, a question immediately arises as to which variety of English should be taught to the child. Much has been written about the Nigerian English as a distinct variety of English by different generations of linguists. Proponents of Nigerian English include (Adedimeji 2007; Adebija, 1989; Ajani 2007; Bamgbose 1982). Many scholars maintain that there are enough features in the spoken English of educated Nigerians for such a variety to be called Nigerian English (Ajani, 2007). Occurrence of such distinctive features have been cited at different levels viz: phonological, lexical, morpho-syntactical, and also at the level of discourse and communicative strategies (Ajani, 2007; Adedimeji 2007; Jowitt, 1991).

Examples abound of the different levels which demonstrate the existence of a Nigerian English. However, for the purpose of this work, attention will be focused on the phonological aspect, especially the features which relate to how the sounds of the English language are rendered by Nigerians. At the level of sounds, it is difficult to discuss about the existence of Nigerian English. This is because there are several varieties at this level. Phonological features of different Nigerian languages influence the pronunciation of English sounds by the speakers of the different languages (Idowu, 1999). Such influences have been labelled as: under-differentiation, re-interpretation, and substitution (Adewale, 2007; Bubier 2010).

Under-differentiation occurs when two different sounds are rendered the same way. Nigerians tend to shorten long vowels such that it becomes difficult to distinguish between the meaning of English words containing long and short vowels as they are pronounced as if they were similar (Bubier, 2010). For example, 'sit' /sit/ and 'seat' /si:t/; cat /kat/ and 'cart' /ka:t/. This happens because most Nigerian languages do not have long vowels.

Reinterpretation take place when an English sound is replaced with a sound which is most similar to it in the L1 of the speaker e.g.

/ʌ/ sounded as /ɔ/ (or as /a/ by Hausa speakers)

/ə/ sounded as /ɑ/

/æ/ sounded as /ɑ/

/θ/ sounded as /t/

/ð/ sounded as /d/

/u:/ sounded as /ʊ/

/ŋ/ sounded as /n/

Apart from these general cases, there are several specific cases depending on the L1 of the Nigerian speaker of English. Here are a few examples:

/tʃ/ sounded as /ʃ/ or /s/ (Yoruba speakers)

/v/ sounded as /f/ (Yoruba speakers)

/z/ sounded as /s/ (Yoruba speakers)

/ʒ/ sounded as /ʃ/ (Yoruba speakers)

/f/ sounded as /p/ by Hausa speakers

/l/ and /r/ (used interchangeably by Tivi speakers and speakers of some varieties of Igbo)

/dʒ/ and /y/ used interchangeably by speakers of Ibibio/Anang, and some varieties of Igbo

As the examples above show, there are many varieties of sound representation depending on the speakers' L1. This makes it difficult to set out a sound system for Nigerian English even if such existed and strengthens the case for teaching pupils the Standard variety of English.

## **1.8 The Problem**

Nigerian children have been known to be seriously challenged in acquiring the English language. At the beginning of the fourth year of school, many of them are unable to read and write in English, the language of instruction from then on.

Findings of several studies show that one major reason for this is the improper implementation of the language policy (Adekola 2007; Fakeye and Soyinka, 2009). Teachers of early primary classes use English from the start or a mix of English and the local language with some teachers using English up to 70% of the time learning. In some cases, English has become the default language of instruction at all levels of the primary school (Fakeye and Soyinka, 2009). This has arisen due to a number of factors:

- Pre-primary School teachers lack requisite training in their mother-tongue so are not able to effectively teach pupils using the language
- Teachers are not mindful of the language policy
- Teachers sometimes do not speak the language of the immediate community, not being natives of such community but of another language group
- Class is multilingual making it difficult to choose a local language as the language of instruction (Adekola 2007, Fakeye and Soyinka 2011)

### ***1.8.1 English language results***

As a result of the foregoing, many pupils even at the secondary school level are unable to read English effectively (Anyachebelu, Anyamene, and Adebola, 2011; Mabekoje, 2011) and as such perform poorly in English and also in other subjects. This has resulted in massive cheating and poor performance in internal and external examinations. Poor performance in English has an effect on the performance in other subjects (Fakeye and Ogunsuji, 2009). For this reason, examination results have been consistently poor over the years as depicted by the statistics from Adekola (2007) below:

In 2001, Universal Basic Education Commission (UBEC) conducted a curriculum based national assessment of grade 5 students. The result shows that only one in five students correctly answered more than 30 percent of the test items and less than one percent of students were able to correctly answer more than half the test items.

In the 2003 UBEC curriculum based national assessment, pupils were able to give correct answers to only about one in four test items in English and Social Studies. In each class, results were lowest for English language and for social studies, subjects dependent largely on good literacy skill and efficient language use. Pupils scored higher in tests which were less worded like the non-worded numeracy tests, than on more worded test items.

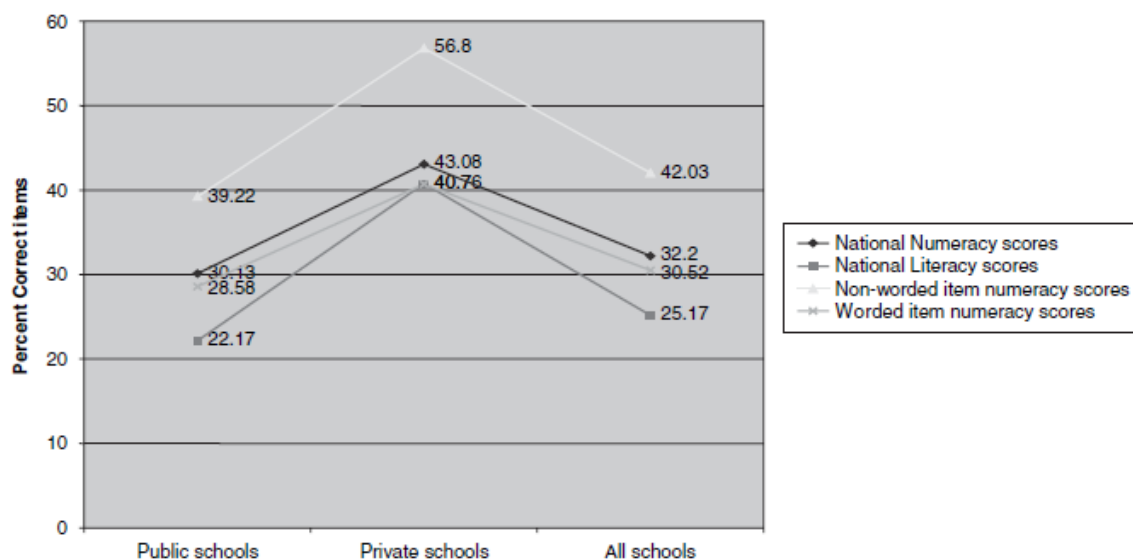


Figure 1.2: Examination results (Source: Adekola, 2007)

Sector	Boys/Girls
	National mean
Urban	44.61 (SD=20.61)
Rural	39.10 (SD=21.73)
Public	41.22 (SD=21.46)
Private	48.17 (SD=21.51)
Attended pre-primary	45.37 (SD=21.73)
Didn't attend pre-primary	41.00 (SD=51.52)

Figure 1.3: Examination results 2 (Source: Nigeria Education Sector Diagnosis, 2003)

In each of the results above, the private schools scored higher than government schools but average scores were still below 50%.

Several reasons have been identified for the low achievement rate of pupils in most primary schools in Nigeria. The reasons include poor infrastructure, teacher absenteeism, and lack of teacher commitment in the government schools (Adekola 2007; Ekpo et al 2007; Omolewa 2008; Fakeye and Soyinka 2009; Mabekoje, 2011). Other reasons given by the same authors can be summarised as follows:

- Use of English language for instruction in the early primary school classes
- Non availability of workbooks and textbooks
- Teachers are poor in English language skills
- Poor preparation of teachers to teach reading at initial teacher training institutions
- Lack of continuing training and refresher course for teachers
- Lack of variation in approach to teaching- absence of instructional aids  
storytelling, flash cards, games, role play, group work
- Insufficient guidance for teachers

In addition, research findings show that teachers do not involve the pupils in the learning process so learning tends to be passive for the pupils for most of the lesson period. Interaction which is known to be a facilitator of second language acquisition (Walsh, 2006) is almost totally absent. Teachers have been found to do most of the talking. When teacher talk dominates the teaching session, the classroom ceases to be an avenue where “teachers and learners, co-construct contexts” (Walsh 2006 p.16). In addition, because the pupils are not actively engaged, they tend to be noisy and disruptive. As a result of this, a good proportion of the class time is used for disciplining pupils for engaging in disruptive behaviour (Amuseghan, 2007). Effective communication between teacher and pupils is essential to a good teaching and learning relationship (Walsh, 2011) and will go a long way to reduce the amount of time spent on disciplinary actions. This will in turn make more time available for the teaching business of the day.

Only a negligible number of teachers were found to organise learning tasks for pairs and groups of pupils and to prepare and use appropriate instructional aids.

Some of the reasons stated above, which this research purposes to address, are the method of teaching reading, classroom practice of teachers, and provision of adequate and effective guidance for the teaching of literacy skills.



## **1.9 Teaching reading in Nigerian primary schools**

The method used in Nigeria is as prescribed by the national curriculum which is reviewed in the next section. First, I will review the English language curriculum for primary one and two and then discuss how the teachers implement the curriculum.

### ***1.9.1 English Studies: The Nigerian Curriculum for Primaries One and Two***

In line with the policy on education, which states that English should be taught as a subject in the first three years of school, the Primary One curriculum is focused on the learning of vocabulary. This means the emphasis is more on listening and speaking than on reading and writing. Presumably, this is to enable pupils gain sufficient use of the language to then enable them learn how to read and write later; more like the L1 speaker who usually starts by learning to hear and to speak. The curriculum progresses as follows:

a) Topic 1 to Topic 8 focuses on greetings, identification of self and others, and identification of objects and storytelling. If this progresses well, pupils should be able to engage in some level of meaningful discussion at the end of lesson 8.

b) The focus of lesson 9 is the identification and differentiation of sounds. The teacher is to “explain the different sounds” and pupils are to “take turns in identifying the sounds” (p.7) in the names of various objects in the environment. The performance objectives are for the children to identify sounds and differentiate between the sounds in the objects. The evaluation guide directs that pupils should be able to pronounce two objects correctly and differentiate the sounds correctly. At this point, there appears to be a gap in the guidance the teachers are given because at no earlier point was there a mention of sounds. If pupils had not previously learnt any sound, it will be impossible for them to identify or differentiate between the sounds. However, it is obvious that this policy document recognises the importance of the knowledge of sounds early enough in the teaching of reading skills.

c) The focus of topic 10 is the identification of objects with emphasis on articles ‘a’ and ‘an’. If the emphasis was on speaking only, the pupils should follow without difficulty but the teachers do write these words on the board.

d) Also, in Topic 13, pupils are expected to recognise the numbers 1-10 in figures and also in words. The teacher is to write the words on the board and guide pupils to recognise them; it is doubtful that this can be achieved at this point except by rote learning as the

pupils had not been taught the words previously either through whole word or alphabetic method.

e) The next reading lesson after Topic 13 is topic 16 which focuses on literature. The teacher's instruction is to write a rhyme on the board, point out the key words, and read to the pupils while they repeat after the teacher. At the end of that lesson, pupils would be able to "produce some of the key sounds". The guidance here appears unclear as to whether the pupils are expected to read key words as the teacher points them out. Also, it is hardly clear to the reader, including the teachers, which sounds are referred to as the 'key sounds'.

f) Writing starts in Topic 22 with pupils learning to make strokes and curves to form letters. This makes it appear as if pupils had not learnt how to write until this point; only the teacher was expected to write while the pupils read. While this progression may be correct, it is common knowledge as has been mentioned earlier, that pupils are required very early in the session, as early as in Week 2, to copy detailed notes written in English, from the board into their notebooks.

There are two observations to make here: if the pupils start learning sounds in Topic 9, it is possible to teach them how to write the sounds at the same time. Also, six year old pupils do not need to attend school for half a session before they start learning how to write. Beginning to learn how to write in Topic 22 of 42 implies that learning to write begins later than half way into the session.

g) Topic 33 features the next writing lesson and here, the teacher presents words "one at a time to pupils simultaneously with picture and illustrates placing the word card and the picture card side by side on the flannel graph, guides the pupils to match the pictures with the words correctly"(p.24).

Primary One ends on this note with pupils being taught to match picture to words and that only once. By the first reading and writing lesson in primary 2, the curriculum states that "pupils should be able to read simple passages with fluency" (p.5). It does appear that there is a wide gap between attempting to match words to picture once just before the end of Primary One, going on an eight-week long school break, and resuming in Primary Two reading simple passages with fluency. In the very next lesson, pupils are to

write answers to *what* questions and in the next lesson, pupils are to read a passage quickly to get the main idea; and read to get other key ideas and details. From then on, it appears the pupils are expected to read with a certain degree of fluency. While the expectation that pupils in Primary Two read with fluency may be realistic, there are obvious gaps in the curriculum as far as learning to read is concerned. The curriculum appears to recognise the importance of the knowledge of sounds but no foundation is laid for the learning of sounds. It also alludes to the whole word method without any systematic plan of teaching using the method. It would appear that no definite plan has been made for how to teach pupils the basics of reading and writing. The result of teaching based on this curriculum is that the pupils have a poor foundation for reading and writing. Having missed the foundational principles, such pupils drift on through the primary school system and at the end of primary school; many of them cannot write a sentence.

Because the guidance offered by the curriculum is insufficient, when it comes to implementation, teachers are often left to their ingenuity and what they remember of being taught to read. The following section summarises how the curriculum is often interpreted and implemented by teachers.

### ***1.9.2 Implementation of the curriculum***

There is often a difference between the prescribed curriculum (intended) and the curriculum in practice (implemented curriculum) (Amuseghan, 2007). It is only when there is a perfect match between intended and implemented curriculum that the expected outcome is achieved (Amuseghan, 2007). The most popular method of teaching beginning reading in many Nigerian schools is the rote learning alphabetic method (Ekpo et al, 2007) where the teacher leads the pupils in chants of the letters of the alphabet and pupils progress to chanting words in order to memorise them. This is especially so in the government schools and the private schools for the poor where a large number of beginning readers in Nigeria are registered (Tooley, Dixon, and Olaniyan, 2005). Teachers start by teaching the letters of the alphabet and often this instruction begins from home through parents and older siblings. Most pupils arrive Primary One able to recite the letters of the alphabets from 'a' to 'z' and to recognise some of them. The teaching instruction in school also starts with teaching the pupils the letters of the alphabet. This usually begins in the pre-school classes. The first year of school is usually focused on

teaching the pupils the letters of the alphabet. In the second year, the pupils begin to learn how to combine 2 letters to form words, and move on to 3 letter words. This is followed by phrases, and then whole sentences. Each of these stages involves repeated drills where the teacher chants the words and the pupils chorus after the teacher (Dixon, 2003). Sometimes, the teacher nominates a pupil who may be slightly ahead of others in word recognition to stand at the board, say the words written on the board by the teacher or read a whole sentence while the whole class chants the words or the sentence after the pupil (Dixon et al, 2011). As noted by Ekpo et al (2007), this method lacks any form of motivation for the pupils as they just memorise words. Learning comes slowly and it does not engage the pupils. They have no idea how the alphabets they were taught earlier become whole words or sentences. The knowledge gained through rote learning is not easily transferrable when they see new words. Also, because many words have similar shapes, differing sometimes in only one letter, it becomes a matter of guesswork when pupils encounter both old and new words. This is one of the reasons why the reading achievement rate of pupils has been slow and poor (Ekpo et al, 2007).

### ***1.10 The rationale for the research***

Much has been written about literacy and the definition is now known to incorporate more than ability to read and write (Edem, Mbaba, Udosen and Enang, 2011) As a result, while there has been increasing research into the social aspects of literacy in developing countries, there is a dearth of research into reading as an individual capacity (Paran and Williams, 2007). Although research in complex literacy practices is highly desirable, the achievement of such literacies is wholly dependent on the attainment of reading skills by individuals for it is only one who can understand the language of the text, and use the conventions of the associated orthography that will be able to participate in more complex literacy practices (Paran and Williams, 2007). In other words, the individual must be able to read and understand written text so as to achieve social literacy. This explains the focus of this work on individual learning to read. The often spoken and written about topic of poor literacy skills and dwindling literacy rates in Nigeria do not arise as a result of a lack of more current topics to discuss but are a result of daily realities which have become cause for real unease. The writers and discussants are genuinely concerned about the decline in literacy as is this researcher. Many reasons have been proffered by previous researchers for the decline in the attainment of literacy skills by pupils and

continuing failure at the English test. Two major ones are the method, and lack of requisite training for teachers. This research aims to investigate the influence of the use of the synthetic phonics method combined with requisite teacher training for the application of the method on reading skills acquisition of primary school pupils in Nigeria. The investigation incorporates the two aspects of teaching which have been pinpointed by previous researchers.

At the centre of this study then, is a desire to seek a method of teaching English which can enhance the capacity of pupils to learn to read and the capacity of teachers to guide pupils to the promised land of becoming skilled readers. It is then that they may succeed at examinations and also participate in the available complex social literacies. Even though such a method may not be the only one which can produce the desired result of enhanced reading skills, the mission of this researcher would seem to have been accomplished if, the findings can in a little way inform policy makers and teachers of a method which can improve the teaching and learning of reading skills of beginning readers in the Nigerian primary school system. Also, I hope to contribute, in some measure, to the provision of clearer and more focused guidance to teachers of beginning readers.

### **1.11 Aims, objectives, and research questions**

As mentioned earlier, there are obvious gaps in the curriculum. Several mentions are made of learning of sounds without any suggestion on how this is to be achieved. The process of helping children to read and write is multidimensional and complicated. (Ashby and Rayner, 2006). Approaching the many dimensions with due thoughtfulness may be crucial in lifting the reading standards of the Nigerian pupil which in turn will improve the statistics concerning literacy in Nigeria. Whereas using the local language as the language of instruction in the first three years of schooling remains a mirage, it is important to seek other ways in which pupils who are taught with English from the first day of school, can achieve literacy skills. Therefore, this study sets out to investigate if the systematic synthetic phonics method of teaching English with clear guidance, in a participatory classroom environment can enhance learning to read and write by Primary One pupils in Nigeria whose first encounter with English is likely to be in the classroom on the first day of school.

The study adopts the case study action research method and the sociocultural principles of learning in order to explore the research question:

"Can the reading skills of Nigerian pupils improve through the synthetic phonics method?"

The sub questions from this overall interest are:

- Is there any statistically significant difference in the improvement in the reading skills of pupils taught with synthetic phonics and those taught using traditional methods in government schools?
- Is there any statistically significant difference in the improvement in the reading skills of pupils taught with synthetic phonics and those taught using traditional methods in private schools?
- Is there any statistically significant difference in the improvement in the reading skills of pupils taught with synthetic phonics based on gender?
- Do pupils' personal circumstances, family background, and teacher circumstances influence the improvement of pupils taught with synthetic phonics?
- What is the attitude of the pupils towards the use of synthetic phonics in the classrooms?
- What is the attitude of teachers to the synthetic phonics method?
- How do the teachers implement the synthetic phonics method?
- Do teachers' patterns of teaching with the synthetic phonics method differ?

### **1.12 My Proposition**

On the basis of previous synthetic phonics interventions in L1 and L2 situations and urban and rural areas, I propose that the synthetic phonics method with sufficient emphasis on pupil participation in the classroom will contribute a solution to the perennial failure of pupils to attain literacy skills Nigeria. Training teachers in the synthetic phonics method equips them with the skill and confidence they require in order to teach pupils how to read. In addition, training them in making the classroom engaging and participatory enhances pupils' learning experience and promotes their desire to learn. This will result in greater literacy attainment by pupils and in future, a higher literacy rate in the country.

### **1.13 Limitations of the study**

This study investigates if the reading skills of pupils who are beginners in learning to read can be enhanced by teaching which uses the synthetic phonics method. Reading skills here refer to word and sentence reading. The study does not investigate reading comprehension. Also, it is hardly possible to discuss reading at this stage of pupils' learning without mentioning writing. As such, reference is often made to writing although the focus of this study does not include writing.

### **1.14 The organisation of the thesis**

The thesis is divided into seven chapters. This first chapter has described the context of the research, the rationale for the study, its aim and significance. In Chapter Two, I consider the existing literature in the field and how they contributed to the choice of the method trialled in this work. I also discussed the theoretical framework used as guidance in carrying out the study. Chapter Three summarises the design and method of data collection applied in the study. Chapters Four and Five present and analyse the data collected both quantitatively and qualitatively. Chapter six discusses the findings of the study and locates them in time, making some recommendations. Chapter Seven, the concluding chapter, summarises the findings and recommendations.

## **Chapter Two. Literature Review**

### **2.1 Introduction**

This review starts by examining how reading is learnt with a focus on second language acquisition (SLA), models of reading development and the role these models play in the choice of the method of teaching reading. It also examines the synthetic phonics method in detail and explains the choice of this method for the current research. This review is vital because the main aim of this work is to explore a possible way of improving the literacy skills of pupils in Nigeria. The literature review provides a basis for investigating this study's overarching research question: "Can the reading skills of Nigerian pupils improve through the synthetic phonics method?"

### **2.2 SLA**

SLA has been defined as "the study of how learners create a new language system" (Selinker 2008, p.1). Although there are several other definitions of SLA, any definition would take account of the processes and products involved in the learning of languages (Van Patten and Benati, 2010). SLA is an inclusive term for second or foreign language learning in both naturalistic and instructed settings including oral and written forms (Dixon et al, 2012). SLA is a relatively young field, (Ortega, 2005) but it boasts of many competing theories. Probably a good way of viewing the competing nature of the theories is as suggested by Van Patten and Williams, (2007) - that SLA can be viewed as the proverbial elephant and the four blind men. Researchers and scholars from different disciplines examine, albeit not blindly, different parts of SLA and come off with different views. The reason for the several and sometimes competing theories may not be unrelated to the fact that SLA is interdisciplinary in its origin and development (Ortega, 2005). It interconnects with four or five related fields: language teaching, child language acquisition, linguistics, sociocultural and psycholinguistics fields (Dixon et al, 2012). It also shares interdisciplinary links with several other disciplines (Ortega, 2005). Following are some SLA theories: Behaviourism, attributed mainly to Skinner's (1957) work on stimulus and response; the innatist theory (Universal Grammar) proposed by Chomsky (1965), the Monitor Model (Krashen, 1982), Functional Approaches (Bardovi-Harlig, 2007); the Associative-Cognitivist CREED (Ellis, 2007); Competition Model (MacWhinney, 1997)); Interaction Hypothesis (Gass and Mackey, 2007); Processability Theory



(Pienemann, 1998, 2007); Skill Acquisition Theory (DeKeyser, 2007); and Sociocultural Theory (Dunn and Lantolf 1998) etc. The last two are further discussed and the Sociocultural Theory receives more attention here because of its relevance to the present study.

### **The skills acquisition theory**

This theory recognises three stages of development. The first stage, the cognitive stage is where the student, learner, apprentice, or trainee acquires knowledge about a skill through observation and analysis of others who are skilled and through instruction or demonstration from those who are skilled. The next stage is when the knowledge becomes 'know how' and the final stage is when the knowledge can be applied with fluency and spontaneity (DeKeyser, 2007).

### **The sociocultural theory**

The sociocultural theory of language learning sees language not just as a system of rules but as a socially mediated process (Barr, 2001). Language learning in the second language classroom situation often arises as a result of the need to become members of the school community where meaning-making is a collaborative activity with other members of the community (Mitchell and Myles 1998). The sociocultural theory is a theory of assisted mental growth which focuses on communication, understanding, and meaning rather than on the form and structure of language (Lantolf and Thorne 2006). According to this model, the learner moves from one level of language learning to another with the collaboration of other social actors e.g. peers, teachers, and other adults. As a result, peer work and group work are very important aspects of the SLA classroom where this model is used (Altenaichinger, 2003).

Closely related to the discussion of theories of second language acquisition are the views on how a child learns to read and is the focus of the next section.

## **2.3 How is Reading Learnt?**

English is an L2 for most Nigerian pupils in the study; but for some, it will be the first language where they will learn to read as most of the pupils have not learnt to read in their L1. Even when there is instruction in L1, L1 and L2 reading instruction usually begin at about the same time (Abe, 1991). There is a difference between L2 learning in a natural context and L2 learning in the school context (Dornyei 2009). The natural context is the

type of learning which results from exposure to the L2 in circumstances such as living with speakers of the L2. The school learning is a result of direct instruction. Learning in a school context as happens in this case implies that the pupils' first exposure to the L2 is at school and will remain so until they gain sufficient mastery of the language to use it in other contexts. Unlike the naturalistic learning situation where the learner would have acquired some vocabulary before they start learning to read and write the L2, the instructed learning combines vocabulary learning at once with learning to read and write in the L2. Because they are learning reading for the first time, the L2 learners are like L1 pupils but they are unlike L1 pupils in that the L1 pupils would already speak the language (Dornyei 2009).

Literature abounds on how reading is learnt; some of the methods proposed apply strictly to L1, emergent reading below, while some apply to both L1 and second language beginning reading situations. Since the pupils in this study are L2 pupils but first time readers, it would be appropriate to reflect on early reading in both L1 and L2 contexts.

Opinions have been widely divided over how reading is learnt. Four popular views have emerged in response to the question on how a child learns to read:

- a) Reading is acquired as naturally as speaking
- b) Reading is acquired in stages
- c) Mastery of a set of skills results in reading
- d) Learning reading is through formal instruction (Calfée and Drum (1986)

Two major perspectives arising from the above summary are the emergent reading theory and the stage theory to reading development. These are the emergent literacy and the skills acquisition approaches.

### ***2.3.1 Emergent Literacy***

The emergent literacy, a theory for explaining beginning reading, came to prominence in the 1980s (Hall, 2003; Britto et al 2006). This theory views the acquisition of literacy as beginning very early in the life of a child, at birth, and continuing without any break until the child becomes a skilled reader (Lonigan 2006; Pianta; 2004; Pianta 2006; Reese, Sparks and Leyva, 2010). Emergent literacy is said to comprise the skills, knowledge and attitudes

that are developmental precursor to reading and writing skills before children enter formal school (Lonigan 2006; Whitehurst and Lonigan 1998). Those who hold this view propose that even before a child is given any direct instruction, s/he begins to acquire reading skills. In other words, as soon as the child is exposed to and motivated to engage with print, the child begins to be literate (Neumann, Hood, Ford, and Neumann, 2011). Whitehurst and Lonigan (1998) propose that reading, writing and oral language develop concurrently and interdependently when children are exposed to a social context where literacy exists, without any formal instruction (Cunningham and Stanovick 1997, Goodman 1986; Hall 2003). While surrounding a child with an abundance of print is a desirable thing to do, the child should have his attention drawn to what the writing represents (Pellegrini, 2001). A stimulating setting may be helpful but is not sufficient (Barr, 2001); children need explicit instruction to become good readers or spellers (Bowman and Treiman 2005). Speaking and listening are different from reading and writing as the former yields immediate benefits which are not applicable to the latter. For example, a child learns to express desires like hunger, thirst, etc. early by speaking about them but does not have such urgency about reading and writing (Prator, 1969). If a child does not verbally express his needs as quickly as possible, such a child would experience delays in having such needs gratified but reading would hardly come as natural to a child as does speaking. Obviously, the child does not suffer any immediate lack or neglect as a result of not being able to read.

The emergent theory of learning to read does not claim to account for L2 situation (Whitehurst and Lonigan, 1998).

### ***2.3.2 The stage theories***

The stage theories took a cue from how readers tackle words they have not read before and formulated principles of how reading is learnt (Erhi and Roberts, 2006). All the principles identified require the basic knowledge of letters and sounds which is the foundation for becoming an accomplished reader (Johnston and Watson, 2005). Learners need to know the sounds of a language and to be able to associate the sound to the letter it represents in order to read (Chew, 1997). Although many scholars agree with this view of learning to read, there have been different understandings of the stages involved in learning to read.

The stage theory was at its peak in the 1980s (Byrne 1992; Snowling 2007). The theory proposes that reading is learnt through different stages (Chall 1996b; Ehri 1992; Frith 1985; Seymour and Elder 1986; Seymour and Evans 1995).

Frith (1985) propose 4 stages of reading. In their first stage, the child starts by learning sight words and making linguistic guesses. S/he then progresses to recognising unfamiliar words by analogy, i.e. associating them with a familiar word they had learnt previously and then guessing the pronunciation in stage 2. In the 3rd stage, children can focus on the whole words as well as parts of the word. It is only in the 4th stage that children are expected to be sufficiently conscious of the parts of the word as to start decoding. Decoding is the “process of translating printed material into a speech-based form” (Treiman and Kessler, 2013, p.657). Both Marsh and Frith’s stages presuppose that children become aware that words are a whole long before they become aware of the parts of that whole. They therefore propose the first stage in reading as a logographic stage. This implies that reading is a task which depends totally on visual memory without any phonological mediation (Bastien-Toniazzo and Jullien 2001; Snowling, 2007). This is a cumbersome method for learners who soon find out that many words share visual resemblance and this could lead to confusion in the mind of the learner (Dixon, 2011).

Erhi and Roberts (2001) outline four stages as the prealphabetic, partial alphabetic, full alphabetic, and consolidated alphabetic stages. Their prealphabetic stage is also logographic; the stage when child does not yet possess knowledge of letters and sounds but s/he is able to recognise familiar words, mostly words of familiar objects like their favourite snack, or drink. This cannot be called reading because when such words were written differently, without the familiar logos or colours, such children were unable to read the words (Treiman and Kessler, 2013). The child recognises these words as pictures, not as words (Treiman and Kessler, 2013).

Partial alphabetic stage according to Erhi and Roberts is when children begin to gain knowledge of letter names and of sounds and begin to make guesses and links between them. In the full alphabetic stage, children have acquired the knowledge of sounds, letter names, blending and segmenting skills and can apply this well to reading tasks by decoding words. While I agree that the knowledge of sounds and letter names is key to learning to read and write, it is possible to attain this knowledge without guess work as children can

be taught the sounds and letter names at a pace that enables them tackle words without guessing (Chew, 1997). In Erhi and Roberts' consolidated stage, children learn larger spelling patterns and these become knowledge that result in their becoming skilled readers.

According to Chall (1983, 1996), reading development is in stages; however, the first stage of reading is not logographic. As mentioned above, giving the child direct reading instruction eliminates the need to guess and to use pictorial cues. Chall (1996) identifies 6 stages of reading development in which the first stages is alphabetic, not logographic. Because of the significance of Chall's work to the present study, I undertake a detailed review of the different stages identified in her work. Hers is a 6-stage model of reading acquisition in which each stage subsumes the previous one. The stages are numbered 0 to 6 with the numberless stage (0) accounting for a greater time span and also greater series of change than any other stage. Stage (0) is the pre-reading stage: Birth to age 6; the period before the child is enrolled in school. What the child knows about reading before first grade is of great importance. Admittedly, L2 children who had little or no contact with the L2 or with reading in their L1 for that matter will differ at this stage but can compensate for this when they start learning (Chall, 1996).

The knowledge of letter-sound correspondence is very important in beginning reading. This is a bottom up approach which implies that learning the parts of the word comes before learning to read the whole. The first stage in learning to read must incorporate blending and decoding skills. The beginning reader should be exposed to print and although decoding is not the same as reading, the child at this stage should be fixated on print (Chall, 1996). The training in sounds should be accompanied by showing the pupils the letters which the sounds represent. At this stage, the child is not only to be exposed to print but is also taught the elements that make up the words i.e. the letter sounds. In addition, the child should be taught how to combine the sounds to make whole words i.e. blending. This stage is applicable in reading instruction for both first and second language situations. Whereas this stage often begins at home for L1 children, it begins at home for L2 children only when there are older ones in the home who have learnt to read, otherwise this stage begins for L2 children when they start school. The most common knowledge children acquire before the start of formal school is letter name knowledge, and in some instances, this is accompanied by letter sound knowledge (Chall, 1996).

In stage 2, at ages 7-8, there is progression in the skills learnt in stage 1. The child becomes faster in decoding as s/he gains speed in decoding skills and with more practice, the child begins to focus on content. Whole word proponents argue that teaching a child to decode is like making the child to call word without meaning (Goodman, 1982). This implies that decoding results only in word reading which does not include comprehension of the words read. However, both decoding and comprehension can go on in quick succession. Moreover, it is impossible for a child to assign meaning to words s/he cannot read. Developing skilled reading entails accurately, automatically and effortlessly converting familiar and unfamiliar written words into spoken language (Ashby and Rayner, 2006). When a child can do this perfectly, s/he has become a skilled reader. Decoding is a useful tool in achieving such a goal as the child who is skilled in decoding soon moves on from decoding to gaining fluency in reading.

In stages 3-5, the child continues to read more fluently and reading becomes a tool for gaining knowledge and new ideas. This continues till the student becomes able to explore deeper aspects of text, sort ambiguities and handle more demanding comprehension. Later, the student is able to work with text, dialogue, argue, and challenge text. Text is no longer to be merely accepted and its contexts absorbed but text becomes a thing to engage and to interact with. At this stage, the student is on the way to becoming an accomplished reader. The stages as put forward by Chall show clear progression from beginning to learn sounds to how a learner becomes a fluent reader.

To conclude this section, there are two major theories on how reading is learnt:

Emergent theory: reading emerges when a child is provided with the enabling environment of abundance of print.

Stage theory: reading is learnt in stages; the first stage may be logographic or alphabetic. Beginning with the alphabetic stage is more profitable to the learner. The stage theory is more appropriate to second language learners. The stage theory requires the use of the alphabetic system so the next section is a brief review of the English alphabetic system.

## **2.4 The English alphabetic system**

The history of the British Isles includes several waves of invasion, some physical and some intellectual (Black and Macrauld 2003; Calfee and Drum 1986). Not only has Britain suffered some defeat, she had also colonised many lands (Flint, K. 2000). In addition,

England has been home to many immigrants for a long time (Mallory, 1989). As a result of these factors, the English language has been subjected to various transformations. There has never been at any point in history, an institution committed to protecting the linguistic purity of the language (Calfee and Drum 1986) and as such, the English language has borrowed extensively from many languages of the world (Calfee and Drum, 1986). This has influenced both the pronunciation and spelling systems that have given rise to the written English system we have today. As a result of this also, the English orthography is one of the deepest orthographies known. As a quasi-regular orthography (Coyne, Farrington-Flint, Underwood and Stiller 2012), it boasts of a great number of complexities and inconsistencies (Seymour et al, 2003); a situation which makes learning to read in English more difficult than in many other alphabetic languages (Vaughn et al 2006).

In English, the same grapheme may represent more than one phoneme ('c may represent /s/ or /k/) and one phoneme may represent more than one grapheme ('y may represent /y/, /i/ and /ai/'). The same sound may be spelt in many different ways, e.g. /u/ in suit and move') and the same vowel letter may be used to write many sounds ('go, got').

There are different methods of teaching reading in English as a result of a combination of factors which include: SLA theories, views on how reading is learnt, and views about the English alphabetic structure. In the next section, I will explore two major methods currently used in teaching reading.

## **2.5 Methods of Teaching Reading**

The most effective way to teach children to read has been the subject of disputes dating as far back as the 18<sup>th</sup> century (Barr, 2001). Different methods have been used in teaching reading, especially beginning reading. Some of these are: the alphabetic method, the phonic approach, the language experience method, and the whole word or look and say method (Beard, 1990). Two of these, the whole word method and the phonics method, remain prominent.

### ***2.5.1 Whole Word Method***

The whole word theory originally emanated from Cattell (1886) who reported that readers identify letters when they are in words better than words presented in isolation and that skilled readers read 4 connected words as quickly as 2 unconnected words. Before Cattell however, Mann, 1838 (mentioned in Kelly, 2008) had claimed that a child would sooner

name 26 familiar words than name 26 letters of the alphabet. The implication of this was that readers perceived of words as wholes rather than as a combination of letters. This is the basis of the meaning oriented methods. Cattell (1886) also claimed that it was faster to call words than to name letters. Findings of later studies, however, did not support Cattell's report and so did not support whole word reading rather, they found out that skilled readers process all the letters in a word (Ashby and Rayner 2006). The whole language method was discussed in the 17th, 18th, and early 19th centuries but gained popularity only in the early 20<sup>th</sup> century when it attracted the attention of educational policy makers (Beard 1990) and has been in and out of popularity since the 1950's (Goswami, 2005). In whole word teaching method, children are taught to identify words as whole units. This can be done, for example, through the use of flash cards where the word is written on cards and sometimes accompanied by pictures (Watson, 1998). The method works by giving children pictures and words to match to the pictures. Flash cards of the pictures and the words are given to the children, usually beginning with words in the immediate environment. This process, which depends largely on visual cues, is repeated until the child begins to associate the word with the picture (Ashby and Rayner, 2006).

Proponents of whole word method claim that it is a more enjoyable learning method than other methods because children can immediately begin to use words that they have learnt and form sentences. Whole word method also works by getting children to memorise the most common words. This results in ability to read those words quickly and the more their sight words repertoire increases, the more fluent children become and they soon find pleasure in reading. However, every new word must be taught to the child by the teacher or someone else who knows the word (Ashby and Rayner, 2006). It is possible but difficult to build vocabulary using visual shapes especially because many words share similar patterns and differ from one another by only one letter, e.g. 'stick', 'stock'; 'big', 'bin' (Dixon 2011; Phillips and Torgesen, 2006). This is because similarity in word patterns leads children to misspelling and misreading words as their sight vocabulary expands. Since they do not know how to read new words unless taught, they tend to do much guesswork and skip over new words. The habit of skipping and guessing can hinder the development of word recognition skills (Ashby and Rayner, 2006). This underscores the importance of teaching pupils the skills which will enable them read unfamiliar words



accurately. The whole word method has been found to be slower than the phonics approaches (Torgerson, Brooks, and Hall, 2006).

### ***2.5.2 The Phonics method***

The Phonics method, an approach which focuses on teaching of sound-letter correspondences (Washtell, 2008), is not a new method but was in existence even in the 19th century (Beard, 1990) and continued to be the predominant method until the second half of the century when the Gestalt psychologists (Kelly, 2008) suggested that children perceive words and shapes as wholes rather than as units (Cattell, 1886). As this opinion gained ground, the phonics method lost favour. Added to this was the influence of Froebel and Dewey's child centeredness (Shapiro, 1983) which caused a change in attitude towards the phonics method as it was regarded as a prescriptive method (Watson 1998). The dissatisfaction with the phonics method led to the popularity of the whole word method in the 1940s and 50s. However, in the past three to four decades, further inquiry into reading acquisition led to the conclusion that phonological processing is the main determinant in the development of reading skills in the early stages of learning to read in an alphabetic orthography (Adams, 1994; Adams, 2001; Bowey, 2007; Burgess, 2006; Treiman and Kessler, 2013). Although it is now widely accepted that the knowledge of letters and sounds is valuable in learning to read, there is no agreement on how to teach this knowledge to pupils. Methods which acknowledge the importance of the knowledge of sounds to learning to read are all often referred to as the phonics method but the disagreement about how children attain the knowledge of sounds has resulted in different approaches to the phonics method. Some advocate analytic phonics (Bradley and Bryant 1983; Coyne et al., 2012; Goswami; 2005) and others, synthetic phonics (Chall 1996a; Chew 1997; Johnston and Watson 2005; Watson 1998; Stuart, 1999). These two different methods are discussed in the next section.

### **2.6 Analytic Phonics**

Analytic phonics refers to the method of phonics teaching in which sounding-out is not used but where teachers show children how to infer the common letter or sound in a set of words (Torgeson et al 2006). Analytic phonics avoids sounding out and pronouncing particular graphemes in isolation but rather encourages children to deduce sound-symbol relationships by introducing them to words which share similarities in sounds. The words may all begin with the same letter and sound, e.g. 'cat', 'cane', 'care'; or end in the same

letter and sounds e.g. 'peck', 'neck', 'beck'. The teacher introduces children to the words and then discusses the similarities among the words pointing out the letters or sounds that are similar. It emphasises the larger sub-parts of words like onsets and rimes and teaches words as wholes before drawing the attention of pupils to individual sounds at different positions, using a whole-to-part approach (Torgeson et al 2006; Goswami, 2005). Typically, the teacher shows the pupils the whole word, they pronounce it and then they analyse the word. The analysis may start with initial sounds, moving on to middle sounds and then final sounds (Johnston and Watson, 2005). This is usually done in alphabetic order where the sounds of the 26 letters of the alphabet of English are taught at different times in all the word positions i.e. first word initial, then in the middle, and later, at the end of words. After teaching the sounds at the different positions, consonant blends are taught at the initial and word final positions. Following this, the consonant and vowel digraphs are taught.

One major method used in analytic phonics is the onset and rime method first proposed by Goswami (1986). Goswami recognises three levels of phonological awareness: syllabic, phonemic, and intra-syllabic and favours the third type as the way children learn to read best because "English is particularly inconsistent with respect to the small reading units... (letters or letter clusters corresponding to single phonemes)" (Goswami 2005, p.276). According to Wyse and Goswami (2005), English is less inconsistent with respect to larger reading units, such as rimes or syllables so they propose that children be taught those larger units rather than at phoneme to grapheme level. Analytic phonics proposes that it is possible for a child to recognise a word as a visual pattern without necessarily associating letters to sounds. Words are divided into initial consonant (onset) plus the end string (rime). The rime of a syllable is made up of the vowel plus any consonant phonemes (Goswami 2005). For example, 'class', 'glass', 'brass'; each of the initial consonants is the onset (c, g, b) while the ending (lass) are the rimes. Analytic phonics proponents argue that children are progressively sensitive to rime unit sound-spelling correspondences in the early stages of their word reading (Coyne et al., 2012). Learning through this method involves the burdensome process of learning a large number of patterns which invariably slows the learner down. Even Goswami agrees that the onset and rime approach places high demands on the pupils as they would need to learn a great number of complex letter combinations (Goswami 2005).

## 2.7 Synthetic Phonics

Synthetic phonics is a fast track multisensory approach to teaching children reading and writing (Jolliffe, Waugh, and Carss, 2012). It involves the use of many of the senses by the pupils. Children see the sounds, they listen to the pronunciation, they say the sounds and they handle the written forms on flashcards, magnetic letters, etc. Being such a multisensory approach, it is highly engaging for the children. Children “need physical movement and activity as much as stimulation for their thinking” (Brumfit 1991 p.v). Synthetic phonics has been found to be not only a fast but also a highly effective method for teaching and learning to read (Chall, 1996; Chew, 1997; Watson, 1998; Johnston and Watson, 2005). The method works by rapidly teaching the pupils, starting with the smallest units of speech – teaching them the sounds, and building up bigger units by blending the sounds together. Synthetic phonics uses a part-to-whole approach (Torgeson et al, 2006) by teaching children the phonemes associated with particular graphemes and then how to blend the phonemes together to form words e.g. /k/ /a/ /t/ *cat*; and how to segment words into their component sounds.

Typically, the sounds are learnt in an order that allows many three letter words to be blended and decoded.

The primary programme used for this study is Jolly Phonics, a commercially available teaching programme designed by a teacher (Lloyd, 1992), and for teachers (Stuart 1999). It has been used with positive results in research on developing reading and writing skills by several researchers (Counihan 2010; Dixon et al 2011; Ekpo et al 2007; Johnston and Watson, 2005; Johnston et al, 2011; Stuart 1999). Other commercially available synthetic programmes in the UK include Read Write Inc. (Miskin), and Floppy’s Phonics (Hepplewhite). The Jolly Phonics programme uses five basic skills developed by Lloyd, Wenham and Jolly (Lloyd, 2013) to teach children using the synthetic phonics method. These are:

- Learning the Letter sounds
- Letter formation
- Blending – for reading
- Identifying the sounds in words for writing

- Tricky words – irregular words

The first skill learnt is the sound of the letter. Children are taught the sounds one at a time and it is sometimes possible to teach one sound per phonics lesson depending on the age of the pupils and their ability to handle the language for example, Johnston and Watson (2005) taught at the rate of two sounds per lesson and had good results. However, in the L2 classrooms the rate may be slowed down if the pupils struggle with the language. In the Jolly phonics scheme, pupils are taught the letter sounds in order of seven groups. The first group of letter sounds make up a large number of 3-letter words; s, a, t, i, p, n. These sounds can be used to make several 2/ 3-letter words e.g. it, is, pin, sat, sit, tip, tin, pit, pat.

Jolly Phonics (Lloyd 1992) teaches in the following order.

1. s a t i p n.
2. c/k e h r m d.
3. g o u l f b.
4. ai j oa ie ee or.
5. z w ng v oo.
6. y x ch sh th.
7. qu ou oi ue er ar

In developing the first skill, learning the letter sounds, JP uses the story approach; each sound has a story which keeps the children engaged and helps them remember the sound. In addition to the story, each sound has an action mnemonic and a song. When all these are used, children enjoy the class; they pay attention and it is easier for the teachers to retain the attention of the children. Children learn through play or teaching that is supported by fun activities (Rixon, 1991; Vygotsky, 1994). In addition, because the stories and actions are quite engaging and practical, pupils are able to retain the knowledge without having to memorise it. Many of the action mnemonics take on the shapes of actual objects. For example, 's' is drawn as a snake. This makes the association between the mnemonic and the sound easy to remember. Short vowels are usually taught before

long vowels and in general, single phoneme-grapheme correspondence, before more complex combinations (Adams, 2001).

For the second skill, letter formation, the teacher guides the pupils in writing the letters. This is also done incorporating as much fun and making it as engaging as possible. Pupils are taught how to hold their pencils; they are encouraged to write the letters in the air following the teacher's leading, on the sand, and on their partners' backs. This makes it possible for the children to practice writing the letter several times without being bored as the task is done in a variety of ways.

Blending, the third skill is the skill required for reading. Blending involves merging phonemes together to pronounce a word (Washtell, 2008). The pupils are taught to assign a phoneme to each letter in a word e.g. /t/ for 't' or each letter combination, e.g. /k/ for the letter combination 'ck' and to merge all the phonemes together to pronounce the word. Blending is taught as soon pupils have been taught a couple of sounds; certainly when they have been taught up to six sounds, children can blend many words (Johnston and Watson, 2005; Newbury, 2012). Blending skill enables children to read while segmenting skill improves their spelling. Blending and decoding involve using the knowledge of the regular relationship between letters and sounds to read unknown words. Pupils are taught how to blend the individual sounds to make words. When they do this, they are able to read words and later, sentences. Blending skill is also taught in different fun ways. Some of the methods of teaching blending (Lloyd and Foxcroft, 2010) are:

Auditory blending: where the teacher says the individual sounds in a word and the pupils shout the word back to the teacher.

Arm blending- teacher says the sounds in a word (usually words with three sounds in consonant- vowel- consonant order) one by one, touching the shoulder, the inner part of the elbow, and the wrist as s/he says each sound. Children sweep from shoulder to wrist and shout the whole word to the teacher. E.g., for the word 'cat', the teacher says 'c' touching the shoulder, 'a' touching the inner elbow, and 't' touching the wrist. Pupils and teacher make a sweeping movement from shoulder to wrist and pupils shout out 'cat'.

Blending is also taught by using songs.

Teaching pupils to blend consonants in clusters (consonant blend) is another helpful way of teaching blending (Jolliffe et al, 2012). Pupils learn to blend 'c'+ 'l'= /kl/; 's'+ 'p'= /sp/; 's'+ 'p'+ 'r'= /spr/. This makes blending of longer words easier for the pupils as it is easier to blend cl-i-p than c-l-i-p; spr-i-nt than s-p-r-i-n-t. When blending starts, pupils are gradually introduced to reading decodable books. Decodable readers are leveled and occurrence of new words is spaced throughout the text so that pupils do not find reading a frustrating experience. When pupils enjoy reading at this level, they will want to read more; if they do feel frustrated with the learning process at this point, they have a tendency to read less (Lonigan, 2006). Also, focusing on decoding in this way helps focus the attention of children on the structure of the word as well as learn to decode words that have similar structure e.g., pat mat, pad, dad, kid, dip, etc. The words in decodable readers are chosen such that attention is drawn to every letter position- start, mid and end (Adams, 2001).

Segmenting entails identifying the individual sounds present in a spoken or written word (Washtell, 2008). Segmenting skills equip pupils with the ability to invent spellings of words (Erhi and Roberts 2006). It enables pupils to write spoken words. The pupils are taught how to identify what sounds are present in the words they hear and in addition, they learn to count the number of sounds in words. E.g. teacher calls out the word 'kick' and the pupils count k-i-k; they are able to tell there are three sounds in the word. Pupils are also taught how to pinpoint the positions of sounds in spoken words; i.e. if a sound is at the beginning, in the middle, or at the end of a word. This skill also is taught using a variety of games. Pupils count on their fingers; they touch their shoulder, elbow or wrist to signify the positions of sounds in words. They do a game called the thumbs up or down game, thumbs up if a sound is in a given word, thumbs down if it is not (Dixon 2009).

Dictation is a prominent aspect of synthetic phonics lessons as it aids spelling skills. Dictation starts as soon as the pupils learn the first sound. From then on, teachers dictate the sound taught each day and as soon as the pupils can handle the task, the teacher starts dictating words with 2 sounds and then CVC (consonant-vowel-consonant) words.

There is need to differentiate early between letters and sounds and though opinion differs as to when the letter names should be taught, there is a general agreement that letter

names need be taught (Joliffe et al, 2012; Treiman and Kessler, 2011). The Rose Review states that it is “sensible to teach both names and sounds of letters” (Rose 2006, para.81).

When pupils have become accustomed to sounds, blending and segmenting, the teacher gradually introduces the irregular (‘tricky’) words (Johnston and Watson, 2004). These are words that cannot be blended nor decoded (Newbury, 2012). The teacher teaches the irregular words by guiding the pupils to apply the sounding skills to the regular parts of the words if any, and memorising through repetition (Vaughn et al, 2006). For example, the teacher might say ‘we’ is a tricky word, the first sound is ‘w’ but the second sound is ‘e’ like the long sound ‘ee’. Letter names are usually taught before teaching tricky words so when it is time to teach tricky words, the teacher may also find it helpful to use the letter names to spell some of the words e.g. ‘a-r-e is ‘a:’. If the ‘tricky’ words are taught to the children systematically and accumulatively (Newbury, 2012), they should pose no major challenge to the pupils.

When pupils become confident in handling the regular words through the blending method, they are then taught the alternative spellings. The pupils not only learn the letter sounds but also the common alternative ways of spelling the sounds (Jollife et al, 2012).

Apart from the tricky words, there are several words in English which do not conform to the letter-sound order shown above. However, many of such words are guided by some general rules (Chew, 1997) and as the pupils progress in their learning, teachers are able to teach them the rules in a fun manner such that it is easy for the children to learn. For example, when pupils have learnt to read CVC words such as ‘kit’, ‘rat’, ‘ban’; it becomes easier to call the attention to ‘kite’, ‘rate’, ‘broke’ in a way that is understandable to them. They work on the instruction ‘if one way doesn’t work, try another’ (Joliffe et al, 2012). By so doing, it is possible to teach them principles which are relevant to large groups of words rather than teach them single words which they then have to memorise (Chew 1997).

In summary, synthetic phonics programmes are carefully planned thereby making them easy for teachers to use and for pupils to follow. Synthetic phonics instruction enables children to self-teach as they learn to tackle new words by sounding them out and blending the sounds (Ashby and Rayner 2006). Bowey (2007) succinctly captured this fact in the following summary: Synthetic phonics programmes carefully sequence the introduction of phoneme-grapheme correspondence and the rate of teaching the

phoneme-grapheme correspondence is carefully timed to suit different groups of children and their different needs. They carefully teach pupils to sound out and to blend words and provide lessons on how to read irregular words. They also teach the alphabetic principles to beginners as well as teach elements of phonological awareness in portions that beginners can understand. Synthetic phonic programmes regularly revise previously taught phoneme-grapheme patterns and provide words and context for practice in form of decodables. They also display commonly occurring letter combinations and highlight them within words around the classroom making them highly visible to the pupils (Bowey 2007).

“High quality phonics teaching ensures that a child will automatically decode a word and if it doesn’t make sense, they will have a secure phonics knowledge to blend it a different way and find the word” (Newbury, 2012, p. 50).

There are several results of successful teaching of English using a synthetic phonics method in L1 situations and in L2 situations. These reports clearly confirm the synthetic phonics method as an effective method for teaching beginning reading. Below is a summary of reports of research which used synthetic phonics principles.

### ***2.7.1 Research in synthetic phonics***

Many success stories abound from studies which compare the effectiveness of the synthetic phonics method with other methods of teaching reading in English. These studies done in many countries have similar conclusions.

In 1967 in the US, Chall revived the beginning reading method which differentiates between code-emphasis (decoding) and meaning-emphasis. The purpose of the code emphasis method was to teach phonics in a direct and systematic way. This resulted in the introduction of more phonics into the beginning reading curriculum (Chall, 1983a). It also led to a shift from meaning-emphasis only to the inclusion of different approaches, especially decoding, in textbooks published afterwards. Apart from Chall’s study, 15 independent studies were commissioned and the results showed that in most of the studies, a direct phonics approach yielded the best success (Chall 1996a). This led to a shift from a meaning-emphasis to a code-emphasis for beginning reading instruction and as such there was a great increase in the amount of phonics that was included in early reading instruction (Chall, 1996). In a report of 27 independent studies into beginning



reading between 1965 and 1966, research sites whose early reading programmes included a separate phonics programme had higher reading attainment than those that did not. In addition to this cooperative research, much other individual research concluded that programmes which focus on early phonics instruction were more effective than those which did not (Chall 1996a) and produced the most positive effects. In addition, the studies confirmed that direct phonics instruction bridged the gap between children from poor social background and their well off peers. This is not surprising because phonics instruction provides ease of word recognition making reading easier to achieve even for children whose parents are not literate and therefore cannot provide any additional support for the children at home. Many other experimental studies from 1967 and 1973 concluded that instruction in phonics produced better results and also that training in blending was found to further facilitate letter-sound or letter-name training (Bond and Dykstra 1967).

Pflaum, Walberg, Karegianes, and Rasher (1980, p.17) disclosed “the apparent superiority of the sound-symbol blending method” and concluded “the sound-symbol blending method mean effect size is significantly higher than the mean for other experimental treatments” Pflaum, Walberg, Karegianes, and Rasher (1980, p.17).

Beginning with an early instruction in phonics provides the child with the skills necessary to become an independent reader at an early age and as a result of learning to read early, the child can soon begin to read to learn (Kelly 2008).

In the UK, Stuart (1999) compared Jolly Phonics and Big Book one hour a day for 12 weeks with 5 year old learners and found the Jolly Phonics group was significantly ahead of the Big Book group in alphabetic knowledge, spelling, reading of words and non-words

Also in the UK, Watson and Johnston (1998) carried out a longitudinal study on classrooms which used three different phonics methods for teaching reading. These were (a) the standard analytic phonics, (b) the analytic phonics combined with intensive training to enable children to hear sounds such as phonemes and rhymes in spoken words and (c) synthetic phonics. In the first 16 weeks of the study, they reported concerning the synthetic phonics taught group: increases in reading and spelling over and above the levels of performance achieved with analytic phonics and also, they reported that the synthetic phonics method led to fewer underachieving children.

The researchers followed up on the progress of the pupils from primary 1 to primary 5 and they found that in addition to the previous gains, the synthetic phonics group had a greater ability to read sight words than the analytic phonics and the analogy taught groups. By primary 4, the synthetic phonics group was 9.8 months ahead of the analytic group in reading comprehension (Johnston and Watson, 2005).

The synthetic phonics training has a long lasting effect because the skills of blending and sounding taught to the children early resulted in their ability to handle unfamiliar words even when the teachers had long stopped using the method in teaching the children.

It is no surprise then that the Rose led Primary Framework for Literacy and Mathematics in 2006, on the basis of the work of Johnston and Watson, strongly recommended synthetic phonics as the method of teaching literacy in England. As a result of this, the synthetic phonics method became the prescribed method for teaching beginning reading in schools in England. Although different reactions greeted the decision, details of such are beyond the scope of this work.

Apart from the US and the UK research, research in synthetic phonics abounds in L2 situations as detailed below:

In a six-week study of Kindergarten 2 (KG2) pupils in a rural low cost primary school in Ghana, Counihan (2010) found that pupils who were taught using synthetic phonics developed phonemic awareness, hence reading skills, quicker than the control group who were taught with a rote learning method. Similarly, Dixon et al, (2011) piloted a 6 month experiment in 20 schools for low income families in India to investigate if the synthetic phonics programme would stimulate the reading performance of the pupils. Typically, in India as in Ghana, English language is taught by a rote learning method which begins with

learning the letters of the alphabet. This is followed by children memorising whole words (Dixon et al, 2011). Over 500 pupils whose L1 was Urdu were in the study featuring an intervention and a control group. The intervention group had a one hour synthetic phonics instruction daily while the control group was taught using the rote learning approach usually used by the schools and had no blending or decoding content. At the end of the study, they found that the L2 children of illiterate parents, living in slum conditions and having little access to reading materials beyond their school textbooks and minimal assistance from their parents, were “able to decode and blend English words successfully when taught using a synthetic phonics programme” (Dixon et al 2011, p.13). The impact of the synthetic phonics intervention was significant in the knowledge of sounds, word blending, word reading, and spelling.

Studies done with Spanish/English bilingual children also found that synthetic phonics resulted in improvement in reading skills. Vaughn et al (2006) had four bilingual teachers provide intervention in English to Spanish/English ELLs whose initial reading instruction was in Spanish in six small groups of three to five students for 50 minutes a day, 5 days a week, from October through May. Letter-sound correspondences began from the first day of lesson and continued throughout the 120 lessons, and a new letter-sound or letter-combination-sound correspondence was introduced every 2 to 3 days. Students were taught to decode phonetically regular words and to practice learning the tricky words by sounding out the parts that could be sounded and learning the part that should be remembered. The researchers reported that letter-word identification and phonological awareness significantly favoured the intervention group. Although there was a mean effect on non-word reading in favour of the intervention, it was not significant.

Similarly, Denton, Anthony, Parker and Hasbrouk (2004) carried out an intervention with 2<sup>nd</sup>-5<sup>th</sup> Grade Spanish/English bilingual students and reported that students in the explicit systematic reading intervention group significantly outperformed the students in the control group in word identification. Although the gain was in word identification only and did not affect pupils’ fluency rates, the reduced effect could be a result of the brevity of the intervention- 22 weeks. A longer term intervention may have yielded a greater effect on the other skills.

Also, Defior and Tudela (1994) had a 6 month supplemental reading intervention for 1<sup>st</sup> Grade pupils in Grenada, Spain. They had four intervention groups and a control group. One group was given phonological awareness training which used plastic letters to establish a link between letter and sound. They reported that early training in phonological awareness which included the use of plastic letters positively affected reading and writing skills gain as the group which linked letter to sound outperformed all other groups in reading and writing tasks. The link between sounds and letters facilitates gain in reading skills (Vaughn et al, 2006).

Goldenberg et al (1992) did an experiment with Spanish beginners. The intervention group used story books read aloud by the teachers several times in school and taken home for parents to further read to and with children. The control group had only worksheets which the teachers used in school and sent home for children to further work on with parents. The researchers gathered that some parents in the control group focused on letter sound and decoding. The intervention group outperformed the control group in reading but there was high association between decoding and reading achievement within the control group.

In another experiment, Goldenberg, (1994) had 3 groups of Spanish kindergarten pupils: one group had simple readers sent home, another group used a strong academic focus on reading with instructions in letter and sound while the third group was left to use general readiness. The group with strong academic focus on reading with letter and sound instruction outperformed the two others in letter name and sound identification, word decoding, word writing, and sentence reading.

A 2003 study (Linan-Thompson and Hickman-Davis) taught a combined group of L1 and L2 students 35 minutes per session of 58 sessions using a method which included a phonological awareness segment. The goal of the phonological awareness segment of the lesson was the development of phonemic awareness, that is, the awareness that words are composed of sounds. This offered students opportunities to attend to, identify, and practice blending, segmenting, and manipulating phonemes in words. The gains made at the post test were significant in word attack, passage comprehension, phoneme segmentation, and oral reading fluency (Vaughn, Linan-Thompson, Cirino, Carlson, Pollard-Durodola, Cardenas-Hagan, and Francis 2006).

Phonics was also found to improve reading skills in dyslexic children. Sanchez and Rueda (1991) in a study which lasted 20 weeks compared dyslexic children receiving phonemic instruction alone without the use of print to those who used phonics, i.e. by use of the alphabetic code. Their 3 intervention groups involved (1) training in adding phonemes (ADD); (2) training in segmentation and use of alphabetic code (write a word: WW) and (3) controlled instruction based on perceptive and motor tasks (P)

The phonics group (WW group) which applied the phoneme-to grapheme rule outperformed the 4 other groups.

In Akwa Ibom State Nigeria, Ekpo et al (2007) conducted a 9-month study using synthetic phonics as an intervention strategy in 5 schools. 168 pupils in ten primary 1 classes were in the study and each school had an intervention class and a control class. Each intervention class was taught using synthetic phonics while the control classes were taught using the usual rote learning method. They reported a marked difference in the post-test scores of pupils in the experimental group. At the end of the study, pupils in the intervention made a gain of between 1 month and 31 months in their reading age while those in the control group “could not read any single word” (Ekpo et al 2007, p.16).

Several of the above studies concerned L1 situations. Where L2 speakers were involved, the teachers were usually L1 speakers. However, the Nigerian study (Ekpo et al 2007) utilised the Nigerian teachers who were the class teachers for the pupils in the study. However, the research was multifaceted, examining not only the impact of the synthetic phonics method but also the effect of health and wellbeing of pupils and the effect of the differences in location, urban and rural on advancement in reading skill. The direct implication of this was a reduction in the focus of the study on the effect of synthetic phonics on literacy skills. This was obvious in the report of the study. In addition, the report of the study only shows the impact of the intervention but does not give the details of the process. Little wonder they called for a replication of the study in other parts of the country. The present work focuses on determining the effectiveness or otherwise of the synthetic phonics method in comparison with the rote learning method on the development of reading skills of beginning readers in some primary schools in Nigeria.

To summarise, some of the studies discussed above are presented in Table 1.

Study	Duration and Participants	Programme used and research type	Result
Counihan (2011)	6 weeks. Pupils in a low-cost private school in Ghana	Intervention: Jolly Phonics; Control: Indigenous methods	Jolly Phonics pupils outperformed the pupils in the control in phoneme awareness and word blending. Jolly Phonics pupils made greater mean gain in spelling than control
Defiorand Tudela (1994)	6 months. 1 <sup>st</sup> grade pupils in Granada, Spain	Four intervention groups and one control. One group was given phonological awareness training which used plastic letters to establish a link between letter and sound	The group which linked letter to sound outperformed all other groups in reading and writing tasks.
Denton et al, 2004	22 tutoring sessions. Spanish/English bilingual pupils	Two Intervention groups: Explicit phonics using decodable texts or Fluency skills. Control: untutored	Explicit phonics gained in word identification more than the fluency skills group and the control group.
Dixon et al, 2011	6 months. Urdu speaking children from low income Indian families	Intervention: synthetic phonics Control: rote learning method	Intervention significantly outperformed control I knowledge of sounds, word blending, word reading, and spelling
Ekpo et al, 2007	6 months: Primary One pupils in Government schools in Akwa Ibom state, Nigeria	Intervention: Jolly Phonics Control: traditional rote learning method	Intervention significantly outperformed control in sound identification, word reading, spelling, and blending
Goldenberg et al, 1992	Spanish beginners	Intervention: Story books read aloud by teacher several times in school and taken home for parents to further read to and with children. Control: Take home worksheet for children to work on with parents. Parents focused on letter sound and decoding.	Treatment outperformed control in reading but there was high association in the control between decoding and reading achievement

Goldenberg, 1994	Spanish Kindergarten	Simple readers used and sent home Strong direct academic focus on reading with instructions in letter and sound General readiness	The group with strong academic focus on reading with letter and sound instruction outperformed the two others in letter name and sound identification, word decoding, word writing, and sentence reading
Gunn et al, 2000	5 months to 2 years. ELLs, early readers at risk; 19 were non-English-speaking.	Intervention: Direct instruction approach to reading.	The intervention group made significant gains above the control in word identification, word attack, vocabulary and comprehension while gain for the non- English-speaking was significant only in word reading.
Johnston and Watson 2005- Experiment 1	20 minutes a day x 20 school weeks. 5 year old L1 children who had just started school	Synthetic phonics Analytic phonics Control	Synthetic phonics group had higher reading ages, outperformed the analytic and the control groups in letter sound knowledge, non-word reading, spelling, phoneme segmentation and cue word reading. Synthetic phonics children were 7 months ahead of the other two groups in reading age and 8-9 months ahead in spelling
Johnston and Watson (2005) Experiment 2	Primary One classes; L1 pupils	Non letter naming Accelerated letter training Synthetic phonics	Synthetic phonics group significantly outperformed the two other groups in reading, spelling, phonemic awareness and irregular word reading.

Johnston and Watson (2005) Longitudinal report	Same children in experiment 1, followed from primary 2-7 in a longitudinal study		For word reading and spelling, the gain in skill compared with chronological age had increased significantly over the years, although the synthetic phonics training ended in Primary 1. In Primary 2, word reading was 11.5 months ahead of chronological age, but in Primary 7 it had increased to 3 years 6 months ahead. In Primary 2, spelling was 1 year ahead, and by Primary 7 it was 1 year 9 months ahead.
Linan-Thompson et al (2003)	L1 and ELLs	No control. The goal of the phonological awareness segment of the lesson was the development of phonemic awareness, that is, the awareness that words are composed of sounds. This offered students opportunities to attend to, identify, and practice blending, segmenting, and manipulating phonemes in words	Word attack, passage comprehension, phoneme segmentation fluency, and oral reading fluency increased greatly. Only 3 students showed less than 6 months growth in 3 months of intervention.
Sanchez and Rueda, (1991)	Dyslexic learners	4 groups: which used the phoneme to grapheme rules (the alphabetic code)	The phonics group (WW group) which applied the phoneme-to grapheme rule outperformed the 4 other groups
Stuart, 1999	12 weeks. 5 year old ELLs	Compared Jolly Phonics and Big Book	Jolly Phonics group significantly outperformed the Big Book group in sound recognition, word and non-word reading
Vaughn et al, (2006)	7 month daily intervention. Spanish/English ELLs whose initial reading instruction was in Spanish.	An intervention to teach the sounds in English and how they relate to letters. Decodable text was used throughout instruction.	Letter-word identification and phonological awareness significantly improved in favour of the intervention group. Although there was



	The aim was to improve reading and writing in Spanish		mean effect non word reading, it was not significant.
Watson, 1998	L1, 1 classes	Explicit, systematic, direct phonics (Synthetic phonics) Analytic phonics Control- look and say	Synthetic phonics group significantly ahead of both analytic and look and say in reading, spelling, non-word.

**Table 2.1: Some studies in synthetic phonics**

From the foregoing, it is evident that synthetic phonics has been found to be an effective method of teaching beginning readers. However, the method is not without criticism. Synthetic phonics has been the subject of criticism by whole word method advocates, and also criticism from the analytic phonics practitioners.

### ***2.7.2 Criticism by whole word method***

Advocates of whole word method vary in their view of synthetic phonics from outright rejection to mild tolerance of the method on the basis that synthetic phonics does not aid word recognition and it hampers comprehension. Some recognise the use of phonics but suggest that it should be used sparingly and only when needed<sup>4</sup>, others reject the idea of phonics claiming that it does not result in comprehension of the words learnt<sup>5</sup>. They conclude that the most important aid to word recognition is the visual pattern of the word especially the length and the letter combinations. Whole word proponents further argue that phonic analysis should be used only to supplement the knowledge of words that pupils have achieved through the context (Schonell 1974).

Another criticism of the phonics method is the claim that sounding the word would not result in comprehension. Goodman (1982a) insists that decoding is calling word without meaning which he says is not reading just in the same way as hearing is not equal to comprehending. It is indeed possible that decoding does not result in comprehension. The fact that a child can blend c-a-t (cat) does not necessarily imply that they know the meaning of the word unless care is given to ensuring that comprehension goes along with the teaching of decoding skills.

Also, opponents of synthetic phonics assume that synthetic phonics lessons are boring regimented drills as it has elements of rote learning. This claim and others will be examined in the course of this study.

### ***2.7.3. Criticism by analytic phonics practitioners***

Apart from criticism from the proponents of the whole word methods, there are criticisms from other phonics methods. For example, Wyse and Goswami (2008) claim that the English language is too complex for synthetic phonics because of the inconsistency of its alphabetic system and its complicated phonological syllable structures. As has been

---

<sup>4</sup> Schonell, 1974

<sup>5</sup> Goodman, 1982

mentioned earlier, synthetic phonics method not only teaches the phoneme-grapheme structure with ease to the children but also teaches the child to blend the sounds that make up the word in order to read the word. Also, synthetic phonics teaches the child how to tackle the exceptions. Goswami and Bryant (1992 p. 50) claim that simple letter sound relationships do not work and also that synthetic phonics poses difficulties for beginners who as yet possess no phonemic awareness. The claim that beginners lack phonemic awareness is unfounded as even toddlers differentiate between *cat* and *mat* in their speech, demonstrating a knowledge of phonemes from a tender age (Chew 1997). Erhi and Roberts (2001, p.119) rightly say that “phonemes are ephemeral and disappear as soon as they are spoken, so are hard for learners to hold onto and manipulate”. Synthetic phonics method recognises that children require a greater consciousness of phonemes than could be derived in spoken language and takes the necessary steps to make phonemes visible to the learner (Erhi and Roberts, 2001). Analytic phonics seems to work on the assumption that beginners have to work out many orthographic principles by themselves but synthetic phonics focuses on teaching children these principles in a direct manner (Chew 1997).

The most important aspect of phonological awareness is phoneme awareness (Gough, Juel, and Griffith 1992; Goswami 1992, Stuart 1999, Watson and Johnston 2005). Synthetic phonics makes the phoneme visible by teaching children sound to letter correspondences. Teaching children phonological awareness in the absence of letter-sound training does not result in much progress (Watson and Johnston 2005). It is only when phoneme awareness training is combined with letter-sound teaching that there is improvement in reading and spelling development. Successful phonological awareness training is the one that is accompanied by teaching how to represent speech sounds with letters (Stuart 1999). Analytic phonics’ claim that segmentation, either in the form of onset and rime or in other forms, is vital to learning to read means that children need to break words into their component parts in order to be able to read (Bryant, 1993). This assumes that reading requires the ability to split words into phonemes; on the contrary, reading only requires the ability to blend the phonemes into whole words, a task which is much easier than splitting words into phonemes and identifying onsets and rimes (Chew 1997). If children are taught early how to map phonemes on letters, they would not need to be taught the complex principles of onset and rime which requires the ability to

recognise a large number of words (Watson and Johnston 1998). Teaching children the letters and their corresponding sounds make the phonemes visible to the pupils, making it easier for them to interact with print in carrying out phonemic analysis. Pupils can easily segment printed words into their component parts as these parts are already visible to anyone who looks at the printed word.

A child is not required to delete or segment phonemes, identify rhyming and alliteration patterns in order to read, neither does the reading process require that children hear individual sounds in a word whose printed form is not shown to the children and sounded out one by one. Reading using the synthetic phonics method simply requires children to blend sounds which they can see in some form of print into whole words and this is not peculiar to English, but also works for Spanish, German, and other languages with regular orthography (Chew 1997; Watson and Johnston 1998). Children learning to read in languages with regular orthography do not have to make recourse to onset and rime in order to read. Interestingly, Goswami (2005) confirms that there is no debate about how to teach initial reading in alphabetic orthographies with consistent spelling systems. If children learning to read in languages with regular orthographies could succeed in doing so through the synthetic phonics method, English learners ought to be able to learn the phonemically regular words using the phonemic approach and not resort to onset and rime (Chew 1997).

In addition to the criticisms examined above, Abe, 1991, writing specifically on methods of reading used in Nigeria said that introducing reading using the synthetic phonics method to teach English poses difficulty for children because they learn to read in the first and second language is done simultaneously (Abe, 1991). As if in self-contradiction, Abe, (1991) noted that even when the Policy is well implemented, Nigerian children are faced with the task of studying at least two languages once they are registered in school. At age six, they are required to learn to read in their native language and in English. Added to this is the fact that English tends to be taught using the whole word method while the native language is taught using the phonics approach. The result of this is that the sound values of letters in the two languages differ and learning to read in the two languages simultaneously often results in confusion for the pupils.

While one would agree with Abe (1991) that using two separate methods to teach reading in two languages to the pupils results in confusion, using the synthetic phonics method for mother tongue and English is an advantage as pupils will no longer need to assign different values to the same letter. This further strengthens the choice of synthetic phonics for this study.

**Summary:** The previous section reviewed two major methods of teaching reading:

1. The whole word method
2. The alphabetic method

There are two main strands of the alphabetic method- analytic phonics and synthetic phonics. The proponents of the whole word method and the proponents of analytic phonics method engage in vibrant criticism of the synthetic phonics method. In spite of the criticisms, reports from the US and the UK where English is L1 to many and from India, Ghana, and Nigeria as examples of L2 situations, and other language learning situations reveal that synthetic phonics is a very effective method of teaching beginners how to read English. Also, Nigerian languages are often taught using a phonics method. Using synthetic phonics to teach English offers a form of continuity in learning. Considering all the stated factors, the choice of synthetic phonics for this study seems appropriate.

## **2.8 Factors in reading achievement**

Regardless of preferred teaching method, certain factors have been known to affect pupil's reading achievement e.g. gender and social background of pupils. This section is a review of such factors as this is vital to answering the question: Do pupils' personal circumstances, family background, and teacher circumstances influence the improvement of pupils taught with synthetic phonics?

### ***2.8.1 Educational and socio-economic background***

Research reports differ on the effect of the socio-economic background of pupils and their reading achievement in different countries. In the developed countries, pupils' socio-economic background appears to be a strong predictor of reading performance. Hartas (2011) found moderate to strong impact of the socioeconomic status (SES) on pupils' reading attainment in the UK and stated that there is compelling evidence that increases in family income, particularly among poor families, have a positive impact on children.

Family background accounts for varying but high percentages of pupils' achievement in OECD countries (OECD 2011).

Studies in the developing countries give differing reports; while Hungi and Thugi (2009) found that SES had lower impact on attainment in Kenya, Ekpo (1999) found that poverty was a deterrent to gaining reading ability and concluded that the socio-economic background of pupils correlates highly with the reading achievement of the child.

Reading books at home has a strong effect on reading (Mullan, 2011). Availability of reading books at home has been found to positively affect pupils reading attainment as it offers the children more opportunity to practice their reading. According to the above studies, the number of books in the home, magazines subscribed to and availability of a daily newspaper and a dictionary were great predictors of successful readers. This could be because having books in the home affords the pupils the opportunity to practice more reading at home while other pupils spend their time on other activities.

Reading out loud to children and children reading aloud to adults was also a great indicator of successful readers. Family literacy studies have shown that the role of parental storybook reading has an impact on children's success in reading attainment (Hartas, 2011). When adults read appropriate texts to their children, it makes children interested in books and motivates them to read on their own (Saracho and Spodeck, 2009). Better readers have been read to frequently at home. Even better college freshmen had been read to more by their parents (Krashen 1989:99).

### ***2.8.2 Pupil personal circumstances***

The personal circumstances of pupils (gender and age) influence their reading achievement (Hungi and Thuku 2010).

The gender of the pupil has been found to have a significant effect on reading attainment. Whereas boys and girls in primary school achieve similar results in other subjects, girls are found to achieve higher than boys in reading and spelling (Safford, 2008). A study of 140,000 ten year olds in thirty five countries revealed that girls have higher reading attainment than boys (Twist, Sainsbury, Woodthorpe and Whetton, 2003). When Hungi and Thuku (2010) found a province of Kenya where boys outperformed girls, they found it necessary to explain this phenomenon and suggested that the nomadic nature of the province does not support girls' education. More notably, Johnston and Watson (2005)

and Johnston, McGeown, and Watson (2011) report studies whose results were contrary to the norm. In their studies where synthetic phonics method was used in teaching, boys outperformed girls.

The age of the child is often a determinant of pupil attainment. Many studies find that in the higher classes, the older the child in the class, the lower the attainment (Hungu and Thuku 2009). The reasons for this could be because older children feel out of place with the younger ones and so lack the motivation to study. Also, the pressure of household chores and the need to work to earn may negatively affect their ability to study (Hungu and Thuku 2009). However, in the early classes, older pupils tend to achieve more (Dixon, 2003). This has been attributed to reasons of maturity; the 7 year old in primary one will likely be more mature than the 5 year old and so may understand concepts more quickly than the younger classmates. Also, s/he may be repeating the class and has the opportunity of learning what they had learnt the previous year (Dixon, 2003).

Attendance at extra lessons after school has been found to correlate negatively with pupil attainment (Dixon, 2003). According to Dixon, a child who takes extra lessons after school is often the disadvantaged child having the need to have extra tuition to make up for the gap in learning between him and his colleagues at school. However, in Nigeria, after school lessons appears habitual as many parents just arrange 'lesson teachers' for their children even when there is no obvious need for such.

### ***2.8.3 Teacher circumstances***

Some teacher circumstances have also been found to affect pupil performance. Some of these are discussed below:

Teacher quality/level of education is sometimes said to positively correlate with pupil attainment. Although some studies found that teachers who have higher levels of education appear to have higher scoring pupils, it is possible that higher achieving pupils were assigned to teachers who were more highly educated (Dixon 2003). Some studies find that there is no correlation between teacher level of education and pupil performance (Brumfit, 1991). The teacher's knowledge of the subject matter is a great determinant of pupil performance (Smith, 2008). According to Smith, (2008) teachers should be required to be highly qualified in the subject they teach. Teachers who would teach pupils how to read would need as a minimum, the basic competence in the language

and the ability to read. One cannot but agree with Smith that it would be improper to entrust language learners to a teacher who has insufficient skills in using the target language. If teacher training does not incorporate training on how to teach reading, trained teachers are left to search for methods to use to teach reading. This can result in poor achievement on the part of the pupils (Ekpo et.al, 2007)

While some studies report positive correlation between higher teacher educational attainment and pupils' reading achievement (Dickinson et al., 2006), other studies report that educational attainment of teachers has no effect or even has a negative effect on pupils' achievement so the longer the teacher's years of experience, the less the pupils' attainment (Dixon, 2003). Some reasons given for this are that teachers who have been long in service most often have not had regular training and may not be up-to-date in their practice. Also, such teachers may not be as motivated as younger ones who are just coming into the profession, full of enthusiasm and eager to practice what they learnt in teacher training (Dixon, 2003).

#### ***2.8.4 School factors***

School factors have been found to contribute greatly to pupils' achievement (Hungu and Thuku, 2009). Some school factors which are relevant to the present study are class size, and the amount of time spent learning.

The amount of time spent on a subject positively correlates with achievement in that subject (Ekpo et al 2007). If a subject is featured often on the time table, the pupils have more opportunity to engage with the subject and as a result pupils achieve more in such a subject. If a subject occurs scantily on the timetable, the pupils have less time to learn the subject and their interest may not be sustained. Also, if there is a wide time span in contact times for the subject, pupils may even forget what they learnt before it is time for the next class. Adequate instructional time (Ekpo et al 2007) is essential for reading development

Class size or pupil teacher ratio is another factor in pupil learning. (Dickinson et al. 2006). Depending on the subject, class size could have a positive or negative effect. Large classes can positively affect reading classes especially as pupils can learn from chorus answers (Lloyd, 2010).



In summary, certain factors have impact on pupils' reading achievement. They include: gender, age, pupil socioeconomic background; pupils' personal circumstances; teacher factors and school factors.

## **2.9 Theoretical Framework: the Sociocultural Theory**

As the study employed a case study design, it was important to identify a theory before collecting the data. This research is about the development of the knowledge of reading in L2 children. Knowledge development has been an issue of interest to researchers through history and there is no scarcity of theories of knowledge development.

Vygotsky (1896-1934) extended the bridge of knowledge development in the sociocultural theory as laid down in his theory of the Zone of Proximal Development (ZPD). The ZPD is "the distance between the actual development levels as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.86). The theory holds that human development must be viewed in the social context and that learning or development occurs in the place of interaction with more knowledgeable others or experts, i.e., parents, teachers, peers, who act as guides. The adult, as an older member of the community of knowledge is able to provide the child with the tools s/he needs to obtain knowledge. These tools are usually in the form of signs and symbols which the adult models (Lantolf, 2008). The child does not merely copy the adult but transforms and extends what the adult models to them by imitating the adults (Lantolf, 2000). Imitation leads to the creation of novel ideas resulting in greater expertise for the child. When the child can imitate adult models without the assistance of the expert, he is said to be independent (Zuckerman, 2003). Literacy acquisition involves the acquisition of cultural tools which help in memory development (Vygotsky, 1994). There are four stages by which knowledge acquisition passes from external and becomes internal (Vygotsky, 1994). The first stage is the lower mental level. Memorisation, which is a result of repetition or of the occurrence of new phenomenon, is characteristic of this level (Bodrova and Leong, 2006). At the lower mental level, learning is a reaction to stimulus (Vygotsky, 1994). Learning at this level depends much on external factors e.g. teacher's instruction. As the child learns to use these external cultural tools, he develops higher mental functions and can control the process and the outcome of learning. Learning at this level is deliberate and it is to this level that learning

to read and write belongs. Deliberateness in learning letters and sounds leads to the ability to apply the knowledge to words rather than word memorisation which requires that each new word, and so, a large number of words, be learnt and committed to memory. In-between the stage of external knowledge and when the knowledge becomes 'ingrown', there is the second stage, which is the intersubjective stage where the teacher or more knowledgeable peers share with the child; it is a shared stage as the knowledge does not belong to any individual (Zuckerman, 2003). At this stage, children are given specific support/tools to aid their learning by means of scaffolding e.g. the actions which accompany the learning of the sounds. However, suitable scaffolding ensures that support withdrawal begins at the same moment that the support is offered. This can be likened to preventing children from using the actions when blending the sounds to form words. This becomes a cycle where the teacher provides support, pupil learns, support is withdrawn, support is provided for higher tasks, support withdrawn, etc. (Bodrova and Leong, 2006). This progression ensures that the potentials of the pupil are continuously maximized. The third stage is when the child can use the knowledge independently but still requires external prompts like action mnemonics or the alphabetic chart as support for remembering the sounds and the letter sound relationship. In the final stage, the child can remember and call forth knowledge gained from within himself. The child, who previously decoded all unknown words, now remembers many words by sight as their reading becomes more proficient (Newbury, 2012). They also gain automaticity in tackling future unknown words. Knowledge is now ingrown or acquired. The child has moved from other assisted to self-assisted, he has become the agent of his change, having acquired methods for self-learning (Zuckerman, 2003; Vygotsky, 2004). The foregoing highlights the role of social interaction and the place of the learner in the construction of meaning; the learner plays an active part, not being just a passive learner. The teacher's role is to guide the learner to discover meaning, offering assistance at those points in the development where the learner requires such assistance. When assistance is offered at those points when needed, teaching is said to have taken place. Learning is viewed as an apprenticeship, and the learner as coming to join a community of practice. The learner is not a *tabula rasa* into which knowledge is to be poured or a bank account into which informational currency is to be deposited (Tharp and Gallimore 1988) but is an active participant in the classroom. The ZPD recognises the fact that learners have the ability to contribute meaningfully to the learning exercise; needing the adult's guidance to achieve

what the child cannot achieve alone. Under the guidance of an adult, the child develops knowledge.

Play (role-play) is a major element of the sociocultural theory as it facilitates the process of development for a child, enabling the child to experiment with adult roles yet to be developed (Schinke-Llano, 1995). Thus play enhances the zone of proximal development of the child. In play, the child is always behaving beyond his age, above his usual everyday behaviour; in play, he is as it were, a head above himself. The relationship of play and development is comparable to the relationship between instruction and development (Vygotsky 1978, p.74). Play, referring more to advance role play like child playing teacher in partner work in the synthetic phonics classroom, elevates the child to the highest levels of their zones of proximal development (Bodrova and Leong, 2006).

As a result of its leaning on the sociocultural theory, the research engineers a departure from the rote learning approach to the use of partner work, group work, games, and a participatory classroom environment. Synthetic phonics teaching requires that at the beginning pupils are given direct and systematic instruction. Once they have acquired some basic skills, they are able to partner with the teacher in generating more knowledge and skills. Knowledge acquired from learning the basic skills is often enough for the pupils to develop more advanced skills (Chall, 1996a). In other words, the teacher as the more knowledgeable adult rapidly introduces the pupils to the major idea of sounds as the smallest units of spoken language, blending the sounds together to read words, and identifying the sounds in a word in order to write the word. Once this is done, the children are guided to take more responsibility for their learning as the teacher reduces the amount of direct teaching and gradually increases the level of tasks given to the pupils. This helps the pupils to move from one level of learning to read to the next.

The sociocultural theory recognises the fact that development is not linear and learners can improve and sometimes regress in the development process; the focus is therefore on processes and changes not on fixed measures like products and states (Schinke-Llano, 1995). This position is compatible with the synthetic phonics expectations of pupils at the different stages of learning and is a very effective way of teaching pupils to become independent readers.

## **2.10 Conclusion**

In this chapter, I discussed the two major views on how children learn to read and some methods of teaching reading. I also examined some theories of SLA and their effect on methods of teaching reading in a second language. In addition, I explored the role of pupils' background in learning achievement. From the review of literature, it is possible to conclude that synthetic phonics has resulted in improvement in reading skills in both L1 and L2 situations. Overall, the method has been upheld as one which improves literacy skills in different pupil circumstances and this has led to the decision to trial the synthetic phonics method in this research.

In the next chapter, I will discuss the methodology adopted for the research as well as the data collection tools and the sample.

## **Chapter 3. Methodology**

### **3.1 Introduction**

This research stemmed from an interest in initiating an improvement in the literacy skills of Nigerian Pupils. It is an attempt to respond in some way, to the illiteracy level in the country where 35 million adults (45% of the population) are illiterate (Adekola, 2007; Udonquak, 2010; UNESCO, 2012). Many secondary school students are unable to meet basic literacy expectations and pupils are unable to read fluently after years of schooling (Fakeye and Ogunsuji, 2009; Mabekoje, 2011; UNESCO, 2012). The research explores another method of teaching reading skills, the synthetic phonics method, in the hope that the method would contribute positively to the improvement of literacy in Nigeria.

Chapter One explored the current English curriculum and its implementation and drew attention to gaps in the curriculum and in practice which could hinder the attainment of the literacy goals. Chapter Two was a review of the literature on methods of teaching reading and the benefits of the synthetic phonics method to teaching English literacy. Previous studies found that synthetic phonics method accelerated the reading and spelling skills of pupils in L1 and L2 situations; rural and urban settings; the level of parental literacy and socioeconomic background notwithstanding. Based on the success of the synthetic phonics method in teaching English in the different situations examined, I choose to trial the synthetic phonics method.

In this chapter, I will outline and rationalise my approach to research. I will proceed to present the mixed method strategy used for this research, describing the case study/action research design and how such a design allows for both qualitative and quantitative data collection methods. The mixed method approach allows for the use of pre and post-tests for pupils, background questionnaires of pupils, as well as classroom observation, pupil interviews, and teacher focus groups. This chapter also sets out the different components of the research, and discusses ethical issues. A brief description of the extensive pilot study for the research concludes the chapter.

### **3.2 The research context**

To reflect, the research context is Bonny Island which is located at the southern edge of Rivers state in the Niger Delta area of Nigeria. Bonny and Finima towns boast of 8

government primary schools and about 20 private primary schools (Education Board, 2011).

The choice of Bonny Island for this research is partly because it has features of both rural and urban settings and so can provide data reflecting both types of communities. In addition, it was a convenient location as I had my home there and hoped that that would facilitate gaining access to the research participants. There are eight government primary schools within the research community, all of which were invited to participate in the research. The choice of government schools was dependent on whichever schools accepted to participate. Although there are many more private schools to choose from, the student population differed in terms of socioeconomic background and number of pupils registered in the school. An attempt at taking these two factors into cognisance influenced the choice of the private schools included in the research. As a result of the mentioned factors, the sampling method was opportunistic (Bryman, 2012). The sample may therefore not be representative and the result of the study may not be generalisable.

### **3.3 Study aim and research questions**

The aim of the study is to explore whether a synthetic phonics intervention can improve the reading and writing attainment of Primary One pupils in Nigerian schools. The research adopted the sociocultural theory with a case study/action research design.

The overall research question is:

"Can reading skills of Nigerian pupils improve through the synthetic phonics method?"

### **3.4 Paradigms and the process of research.**

The design of a research depends on the researcher's paradigm. This is because the choices researchers make in what and how to research are directly linked to their paradigmatic preference. As a result of this, a discussion on paradigms is pertinent to a research of this nature.

A paradigm is like lens through which the researcher sees and makes sense of his world (Greene, 2007). This lens comprises suppositions about the character of the social world which the researcher aims to understand. It also determines the kind of knowledge the researcher can gain about this social world (Greene, 2007). Two major paradigms are relevant to the social science researcher; these are the positivist and the constructivist or

interpretive paradigms. The positivist is concerned about measurement and analysis of causal relationships between variables leading to the ability to predict, measure outcomes and formulate general rules in a value free manner. The positivist paradigm is based on causality of a set of events and focuses on outcome rather than processes (Barr, 2001; Denzin and Lincoln, 2000). The interpretive paradigm on the other hand is value laden, studying the manner in which social experience is produced and how it is made meaningful. It sees reality as being socially constructed and does not pursue the goal of objectivity. It leaves room for intimate relationship between the researcher and the researched, and acknowledges situational limitations which accompany inquiry. It focuses on the process leading to the outcome of a research.

Three major terms are pertinent and noteworthy in the study of paradigms which are: ontology, epistemology and methodology.

Ontology describes the form and nature of knowledge or reality (Denzin and Lincoln, 2000) and how and to what extent one can gain knowledge of a subject.

Epistemology relates to belief about knowledge and what we understand and accept as truth. It questions if there is something called the truth and also questions the relationship between the researcher and the researched (Denzin and Lincoln, 2000). Is there any relationship between the researcher and the researched or is the researcher a passive observer objectively reporting issues?

Methodology refers to ways of gaining the knowledge that the researcher sets out to gain. This comprises the choice of methods to be used in collecting, analysing and interpreting research data. Not all methods are suitable for all forms of research and the choice of method will depend on the researcher's ontological and epistemological orientation.

The personality, values, and beliefs of the researcher are a great determinant in the choice of ontology, epistemology, and methodology. As such, there is no such thing as objective observation, only observations as agree between the observer and the observed (Lincoln, Lynham and Guba, 2011). Paradigm has been described as the net that houses a researcher's ontology, epistemology and methodology. The researcher's paradigm determines their research stance.

### ***3.4.1 My researcher stance***

Paradigms interact and they exhibit confluence and as a result, boundaries shift between paradigms (Lincoln, Lynham and Guba, 2011) This is an advantage rather than a predicament because it becomes possible to engage a combination of philosophical paradigms, theoretical assumptions, methodological traditions, data gathering and analysis techniques, personalised understandings and value commitments (Greene, 2007). I believe in communal consensus about what is real, useful and meaningful. I approach research in a collaborative manner where the researcher and the researched collaborate in creating understandings. Though it is not possible to separate myself from all forms of relationship with the phenomenon I observe and report, it is possible to achieve a momentary critical subjectivity in participatory transactions (Lincoln, Lynham and Guba, 2011) e.g. when conducting tests and interpreting test results; actions which are an unavoidable part of an intervention such as I did in this research. I believe that mixing philosophical and epistemological assumptions is defensible (Greene and Caracelli, 2003) and so I will describe my approach to research as both positivist and constructivist. This resulted in my choice of research methodology as a mixed method case study action research using an intervention strategy.

### ***3.4.2 A Mixed method***

A mixed method design is one in which more than one paradigm or world view is used (Tashakkori and Teddlie, 2003). Mixed method designs yield a richer and stronger range of evidence than can be accomplished by a single method alone (Bryman 2008; Gobo, 2011; Onwuegbuzie and Leech, 2005) and for this reason, the research utilises a mixed method design in an intervention which uses both quantitative and qualitative methods of data collection.

The positivist strand of the research investigates what happens to pupils' reading skills after a period of intervention. This requires using pre-tests to determine their skills level before the intervention; and post tests to determine post intervention skills level. This is an objective method of gaining and interpreting data as reading tests obviously measure what they are said to measure (Bryman, 2008). However, experimental design is limited in that it treats teaching as a variable and studies its effect on the outcome, in this case, improvement of reading skills (Barr, 2001). It omits the process which leads to the outcome, an omission which the constructivist strand takes care of by using subjective



means to explore human interaction and behavior. This entails using strategies which reveal how the instructional method works, how pupils respond to the method, and how different teachers implement the method (Barr, 2001). To do this necessitated data collection by means of teacher focus groups, classroom observation and pupil interviews. Interpreting data from such interactions involved transforming real life happenings into reports. This required an empathetic approach and often an examination of the beliefs, attitudes and motives of the research participants and an understanding that there are multiple realities.

### ***3.4.3 An intervention***

Educational research benefits from several studies into different phenomena making it possible to carry out intervention studies based on the findings of previous researchers (Wright 2006). The contributions from such findings become the basis for trialling new ideas in classrooms where there are perceived needs for improvement. As a result of previous cases of successful interventions, I will adopt an intervention approach in a case study/action research situation which engages the teachers and puts them at the centre of the research side by side the pupils.

The research design adopted for this study was guarded by the principles of the sociocultural theory; a theory that maintains that human learning is a socially mediated process which is dependent on interaction with other humans (Lantolf, 2008). In the process of scaffolding (Daniels, 2001), the learner, assisted by others – teachers, siblings, parents, or peers- achieves his learning objective (Trudge, 1995; Vygotsky, 1978). In the course of the intervention, I encouraged the teachers to use partner work, peer teaching, group discussions, games and role play in the classroom. This was a departure from the rote learning method which the teachers had been accustomed to using but does not make learning participatory for the pupils. This method aimed to help the teacher engage and assist the pupils in their learning so that the language class becomes a class that both pupils and teachers look forward to rather than dread. The result expected from the intervention was an improvement in reading skills of pupils.

### ***3.4.4 Why a mix action research and case study?***

A case study where the researcher solely carries out the intervention would suffice to answer the research questions in this study but if the intervention has obvious positive

influence and is able to fill a gap (Rainey, 2000) as hoped by this researcher, it will be difficult to engage teachers in the implementation of the research findings (Brannen, 2005). This is because the process will be alien to them and they would not understand the process which led to the findings. Rather, collaborative studies between researchers and school teachers have been beneficial to teaching and learning (Barr, 2012). The importance of including practitioners in L2 research cannot be overemphasised (Hancock, 2001) and if research is to be useful in informing policy, the research needs to involve the implementers of policy (Brannen, 2005; Zeuli, 1994). Engaging teachers in the research process makes them research partners, being a part of the process and watching out for the result as much as does the researcher (Vogric and Zuljan, 2009). If at the end of the intervention, there appears to be a positive influence, the teachers will be eager to implement the research findings. It is therefore important not only to engage the teachers in educational research but also to put them at the centre of the research (Jester, 2010). Two research designs which have been combined effectively in achieving such an effect are action research and case study designs (Jester, 2010). This is possible because a case study by design studies a specific phenomenon in-depth (Burns, 2000) and an action research employs set procedure for the purpose of creating new knowledge (Rainey, 2000). The in-depth nature of case study usually reveals gaps in knowledge or practice and the action research makes room for experimenting with processes which lead to the development of new knowledge (Silver, 2008) which may then be used to fill existing gaps and bring about improvement in teaching and learning. As a result of its in-depth nature, a case study helps practitioners gain insight into the dynamics of classroom situations thereby enhancing understanding of existing problems and possible solutions. A further advantage of the case study/action research design is that each uses a wide range of methods for data collection and analysis (Borda, 2005; Nunan, 2004) and case study overlaps with and readily links with other types of study (Hakim, 2000). As a result, it was possible to combine the case study research with action research.

### ***3.4.5 Action Research***

Action research refers to a form of research whose aim is to improve the situation being studied (Silver, 2008). Action research entails diagnosing a problem, planning and implementing a remedial action, and monitoring the effects of the action (Burns, 2000). It is a multimethod research which incorporates quantitative social research and

qualitative research methods (Greenwood and Levin, 2000). Collaboration is one of the characteristics of action research (Vogric and Zuljan, 2009). It is a group activity which can be descriptive or may be aimed at improvement (Nunan, 2007). Whether descriptive or for improvement, action research starts with the identification of a gap, leading to modification in practice by the practitioner, and the modification in practice often results in an improvement (Nunan, 2007). Collaboration between researchers and teachers is often valuable for achieving desired improvement in practice. Recent times have witnessed a growing gap between language teachers and researchers unlike in the days when teachers looked to researchers for guidance and texts “proudly boasted of being based on modern linguistics” (Krashen 1989 p.29). Rather, there has been an estrangement between researchers and language teachers because the methods from the universities did not produce the desired effect. The behaviourist psychology and the so-called cognitive teaching supposedly derived from transformational generative grammar did not yield the desired results; students could not use the target language for even the simplest of communication. The teachers learnt to reject theories and rely on intuition and ideas. This has resulted in constant change in methods and downright eclecticism. Because teachers are wont to reject theories, researchers and theoreticians often consider language teachers to be anti-intellectual and teachers perceived themselves to be merely on the receiving side of theory, just meant to be seen and not heard (Brown 2007).

However, the disaffection between researchers and teachers is unnecessary as they work towards the achievement of similar goals. The state of affairs which has accorded higher status to a researcher/theorist than to a practitioner/teacher has been perpetuated by both sides therefore both sides need to embrace a paradigm shift. Researchers need not remain the sole makers and custodians of theories and teachers should begin to see themselves as makers of theories as well. “We are all practitioners and we are all theorists” (Brown 2007:309). Teachers, policy makers, and material developers search for the best methods but do not pay much attention to theory (Krashen 1989). On the other hand, researchers are often not involved in language teaching of any kind and as such, there is little or no interaction between researchers and teachers. There ought to be more rapport between both parties because if the findings of research require that the teachers make a major change in their teaching method, it is only fair to expect that teachers will

want to have the assurance that this method is good and that it will work successfully. They want to be sure that it will yield great success in their pupils. Because teachers are very influential in referring, diagnosing and intervening, their perspectives impact implementation of curricular intervention, and ultimately, student reading achievement (Wicox, Murakami-Ramalho and Urick, 2013).

Action research arose as a result of dissatisfaction with educational researchers who aimed to force the result of their research on practitioners on the one hand, and from the desire to use immediate experience of practitioners to understand and effect change on the other hand (Borda, 2005; Scott and Morrison 2005). Although earlier views of action research were that it is a research into one's own practice, more recent insights have led to three aspects of action research, viz: subjective, objective, and dialectical (Kemmis and Carr, 2009). From the subjective perspective, the researcher is an outsider; the objective action research involves the insider researcher while the dialectical type involves collaboration between the researcher and the practitioner. In this third perspective, knowledge is collaboratively generated between the researcher and the practitioner, and both accept differences in understanding and abilities between them as being beneficial to the research process (Payne and Payne, 2004). Such action research is context specific; focused on a real life problem and hopes to find solution to the problem (Payne and Payne, 2011).

#### **3.4.6 Case Study**

A case study has been defined severally as an intensive or in-depth study of an identifiable social unit (Payne and Payne 2004; Stark and Torrance, 2006). It involves a thorough investigation of the unit so identified (Nunan, 2007). It is usually much more detailed than when one studies a large sample Silver, 2008). Because it is detailed, it gives the reader a rich understanding of the issue that was studied (Stark and Torrance, 2005).

Case studies have been found very useful in educational research particularly so by small scale researchers (Scott and Morrison 2005). It is the preferred method when the research questions are the *how* or the *why* questions about ongoing events over which the researcher can exercise little or no control (Yin 2009).

The case study design has been seen as the easy option (de Vaus, 2001) and has been a subject of several criticisms. It is faulted as being of less rigour than other research

methods, in answer to which, case study experts have designed robust guidelines to carrying out case studies (Burton, 2000; Yin, 2009). Another criticism of the case study design is the fact that it is not possible to generalise from a single case (Stark and Torrance, 2005). True as this is, scientific generalisations are not made on the basis of single experiment either but on replications of experiments i.e. performing similar experiments under different conditions (Burns, 2000).

### **3.5 Criteria for judging quality of research designs: Validity and Reliability**

This study uses a case study and action research in the context of an intervention. Action research measures validity and reliability by combining quantitative measures with qualitative descriptions (Borda, 2005). Case study is also equipped with rigorous design methods (Borda, 2005; Yin 2009).

#### ***3.5.1 Reliability***

Reliability implies ensuring that if another researcher conducted the same research all over again, they would arrive at similar results (Yin, 2009). This requires proper documentation of all the steps taken in the research so that another researcher could repeat all the steps if that were required. Below are some of the characteristics of an exemplary<sup>6</sup> case study (Yin, 2009) and how this study endeavored to meet the requirements of these characteristics.

Although arriving at similar results at different times and places cannot be guaranteed by a mixed method study such as this, such detailed documentation as suggested by Yin (2009) was the constant goal of this research from the start of the data collection through to the reporting stages. All the process and steps in the data collection exercise have been recorded through test scripts, audio and video recording of classrooms and focus group discussions and researcher's field notes.

#### ***3.5.2 Validity***

Internal and external validity refer to efforts made to remove subjectivity in the research process which are required in both quantitative and qualitative research. It is agreed that there can be no 100% validity as quantitative research leaves room for a measure of standard error and qualitative research is subject to bias (Dixon, 2003). Yin (2009) designs a case study methodology which gives guidance on establishing the validity and reliability

---

<sup>6</sup> A case study which meets the acceptable standards of validity and reliability

of a case study as well as offers detailed discussions on dealing with issues of threats to validity. In addition, the suggested design provides guidance on producing an exemplary case study.

### **Internal validity**

Internal validity concerns establishing causal relationships as different from assumed relationships and is relevant only for explanatory case studies.

Steps to ensure internal validity used in this study include: persistent observations; prolonged engagement in the field; peer debriefing; and member checking (Dixon 2003, p.121).

The data collection design and exercise was continuously guided by theories and by the proposition which targeted internal validity. Data collected from the reading tests were confirmed by physical artefacts such as pupils' class records, pupils worksheets, pupils overall examination results. Constant classroom observation coupled with other casual visits to the schools also provided a source of confirming the data gained from pupils' tests. Teaching sessions were regularly observed, and in addition, unscheduled visits were made to the class teacher and to the head teachers. Teacher focus groups were also used as instruments of confirmation and member checking was carried out by making aspects of the preliminary findings available to the teachers for their feedback.

### **External validity**

External validity addresses the issues of generalisability of the results. This does not refer to statistical generalisations as in the case of surveys which seek to generalise to the entire population. Rather this case study endeavours to generalise results to existing theories. The generalisation of the case occurs at the level of appropriately developed theory and the sociocultural framework served as the main channel for generalising the results of the case study.

#### ***3.5.3 Threats to validity***

The following are some of the possible threats to external validity in the quantitative design and the efforts made to minimise such in the course of this research:

Interaction effects of pre-testing: If there is an improvement in the post-test performance over the pre-test performance, could such an improvement be a result of the pupils' recollection of the pre-test items? At the pre-test, pupils were not told what the correct answers were, neither were they shown their scores. Also, the post-test was carried out 6 months after the pre-test. These two factors- not speaking about the test with the pupils and the time difference between the pre-test and post-test would preclude any recollection of the test items by the pupils. As such, the performance in the post-test could not likely bear any effect from the pre-test.

Reactive effects: Although the teachers consented to participate in the research, they did not seem to have lived in the mindfulness of the experiment. The researcher succeeded in making them to concentrate more on helping their pupils to read better and also on the personal gain to the teacher of having pupils who read better. Although the researcher gained their consent to participate in the experiment, more emphasis was placed on getting children to read better. It is hoped that such a management of the situation reduced reactive effects to the minimum.

Finally on this point, the green room effect was effectively controlled for as the pupils in the intervention were taught by the same teacher who taught them all other subjects and the workbooks used were of about the same quality as the workbooks they use in other subjects. Flash cards were not pictorial but made of plain white cardboard sheets to avoid the influence of fancy materials on the achievement of the pupils.

Face Validity questions if an indicator, e.g., test scores reflects the idea in question (Bryman, 2012). The different reading tests used in this study are standardised tests and they obviously correspond with what they are meant to measure. Bryman 2012 suggests that reading scores seem to possess face validity.

Construct validity refers to the elimination of subjectivity in the data collection process. Although subjectivity could not be erased, the effect was controlled for by using multiple sources of evidence as was done by using standardised reading tests, survey of pupil background, teacher focus groups and classroom observation.

In addition to the aforementioned, other means of conducting an exemplary case study include:

Significance: The case study must be significant; it must be of an unusual public interest or the underlying issues must be nationally important theoretically or in practical policy terms. The present case study is significant on all counts stated. Literacy, especially English language literacy is an issue of great concern in Nigeria and also internationally as a part of the Millennium Development Goals.

Completion: Another requirement of a good case study is that it must be “complete”. It must be obvious that the researcher expended sufficient efforts to collect all needed evidence. Also, the case must not be stamped to a close by time or financial constraints. Rather, the case should be designed to fit into the available financial and time resources. Both factors were considered in designing this case study and the study was carried out to a successful completion.

Look at alternative positions: The case must consider alternative perspectives. The presence in the study, of another group of pupils whose teachers used the traditional method of teaching gave ample room for considering alternative propositions. The evidence was not collected to support a pre-existing position; rather, it was used as an avenue to observe the possible influence of an alternative method.

Sufficient evidence: The case study must display sufficient evidence. All attempts have been made to present sufficient evidence to the reader about the on goings in the field and that the researcher indeed made as many enquiries as possible while in the field. Also, evidence of full attention paid to methodological issues of validity and reliability have been presented.

Further criteria for checking the reliability of a case study include using multiple sources of evidence (Hakim, 2000); creating a case study data base and maintaining a chain of evidence (Burns, 2000). This study made all possible attempts to adhere to the listed criteria as evidenced below.

#### ***3.5.4 Multiple Sources of evidence***

Sources of evidence used in the research are presented in Table 2 below:



Source of evidence	Type of evidence
Pre and post-tests	Phoneme awareness test, oral blending test, Burt reading, and Schonell spelling tests
Questionnaire	Pupil background questionnaire
Documentary	National Policy on Education, primary English curriculum, Newspaper articles
Interviews	Focus group of teachers, pupil interviews
Observations	Classroom observation –both experimental and control schools
Participant observations	Training the teachers, Taking phonics classes, making phone calls and sending text messages
Physical artefacts	Pupils' records and workbooks, letters from pupils

**Table 3. 2: Multiple sources of evidence**

### **Pre and post-tests**

The process of carrying out interventions necessarily requires gathering baseline test data from pupils. The intervention is carried out for a specified period of time after which end line test data are collected (Dixon et al 2011, Johnston and Watson, 1998). The reason for this is that the difference in performance if any between the baseline performance and the end line performance often suggests the direction of the influence of the intervention. Although the intervention is not test oriented, measuring an intervention requires testing. However more effort was focused on the process of the intervention rather than on the tests.

**Questionnaire:** This is a quick source of data collection as they are easy to administer and the data generated is also easy to analyse. The design of a questionnaire for the pupils resembles interview questions because the questionnaire is completed with the assistance of an adult (Bryman, 2012) and unlike adult's self-completed questionnaires, the adult researcher was available to prompt the child on aspects that may be unclear to the child (Bryman, 2012).

**Interviews:** Interviewing children is a useful and acceptable practice which is both similar to and different from interviewing adults (Craig and Taylor, 1999). It is important to sit with children, listen to their perspectives and let their voices be heard. The interviewer should be one that can be trusted by children and like interviews with adults, there is need for informed consent (Craig and Taylor, 1999). Child participants were told that they could choose not to participate and they could withdraw at any time.

**Focus Groups:** Focus groups were first used as a research method in the 1940s (Bloor et al, 2001). They are used to explore social interaction patterns and group dynamics (Stewart et al, 2007). In focus groups, discussions often have a natural flow though the moderator provides direction which keeps the discussion around the topic of interest. The choice of focus group was informed by the fact that focus group discussions generate more information more quickly than individual interviews and produce deep answers/ explanations as one can probe deeper and discuss more extensively.

Also during focus group discussions, the nonverbal responses of participants supplement the data as they revealed information which confirm or contradict the verbal responses sometimes resulting in further probe by the researcher (Bryman, 2008).

A major criticism of focus groups is that the small numbers involved makes it impossible for it to generate data that is representative of the population, but this is not unique to focus groups, other qualitative methods have such limitations.

Another disadvantage is the possibility of group members agreeing to points which seem to have majority backing, not wanting to deviate from popular opinions (Bloor et al, 2001). However, further probing can be used to investigate individual positions.

**Direct Observation:** Structured observation is often used in studying the behavior of teachers, pupils, and of the interaction between them (Bryman, 2008). This involves

systematic noting and recording of events, behaviours and artefacts (objects) in the social setting chosen for study (Marshall and Rossman, 2006). It is a very important method of data collection as it affords the opportunity for a concrete description of what has been observed (Jones and Someckh 2006; Marshall and Rossman, 2006). Observation is used to capture complex interactions in natural settings and can reveal deep attitudes and beliefs. A good example is the body language of teachers and pupils (Marshall and Rossman, 2006). Observation requires the presence of the researcher and a record of the impression of what takes place. Observation can be a holistic account of actions or it could be highly structured detailing behaviour by the use of prepared checklist. One of the criticisms of observation is that it is susceptible to the subjectivity of the researcher (Jones and Someckh 2006). The same authors note that that the observer always has an impact on the observed and the Hawthorne syndrome may prevail. The observed may become over conscious of the presence of the observer or even want to impress the observer. However, while subjectivity may not be totally eliminated, this effect can be controlled if there is mutual understanding between the researcher and the research participants as was the case in this research (Crook and Garratt, 2005).

**Documentation evidence** provides the government policy on education, with step by step details on how the schools are guided to implement the policy.

**Newspaper articles**, though sometimes subjective, offer glimpses into the policy makers' assessments of the success or otherwise of the policy implementation. Newspaper articles also serve as evidence of the state of literacy in the country. These are cited with caution as they could be biased.

**Letters** written by pupils in the pilot provide further evidence on the attitude of pupils to the intervention.

**Participant observation** involves the researcher taking on roles within the research context which can be carried out by training of teachers, informal visits to the schools and participating in the schools' extracurricular activities (Dixon, 2003).

**Physical artifacts** includes access to pupils' class work and workbooks in all subjects, their assessment results in all subjects, and letters from pupils in the pilot.

### **3.6 The plan of the case study**

In order to effectively gather data using the identified sources of evidence, there is need for careful planning of the study. Figure 4 presents the plan for the present study. Table 3 shows how the data generated will be used.

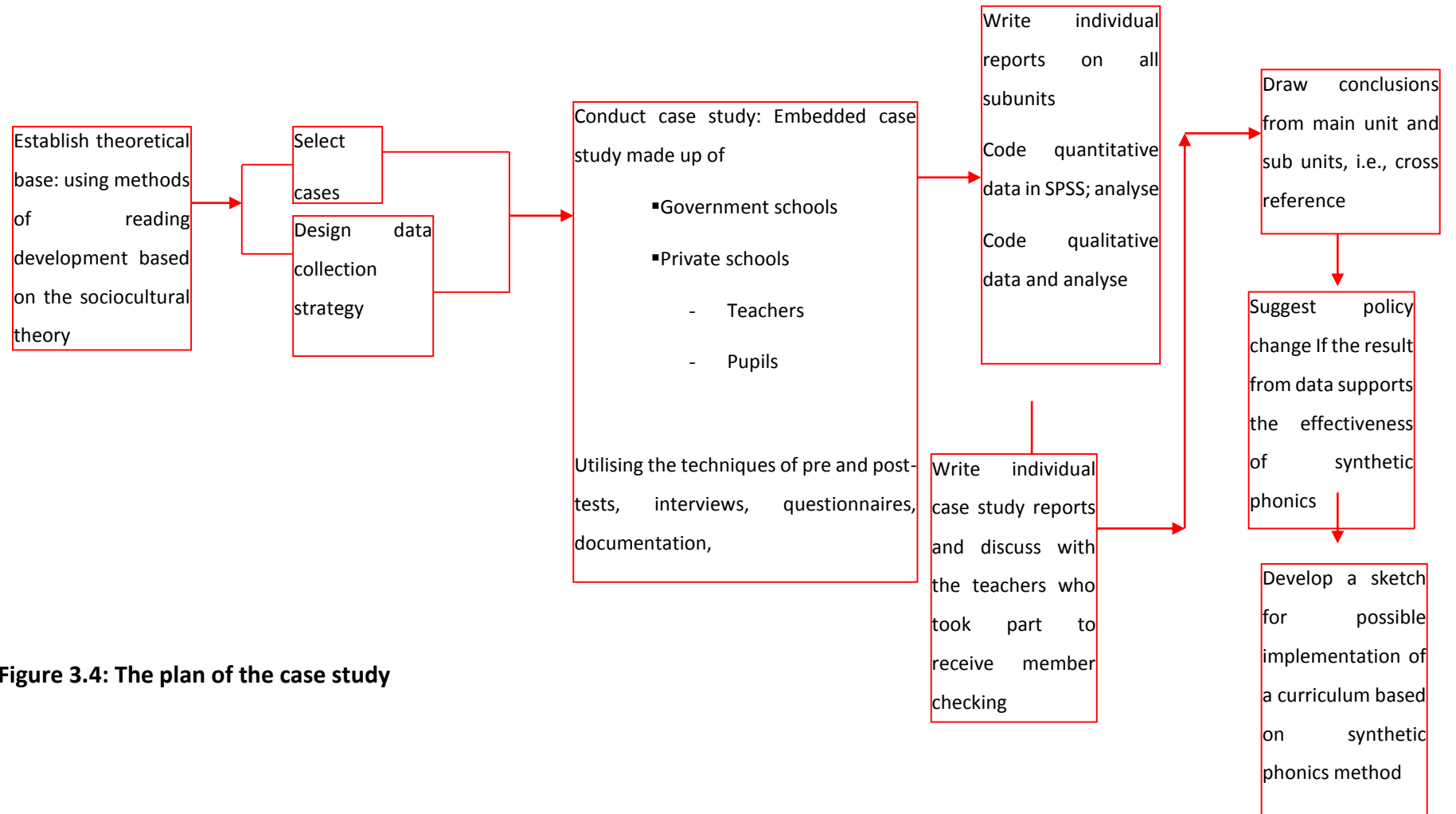


Figure 3.4: The plan of the case study

Unit Being Characterised	Total system	Intermediate Units	Individual Level
The Policy	Teacher training and Primary 1and2 curriculum.	Are teachers trained to teach reading?  Does the pry 1 and 2 curriculum show effectiveness? Is the curriculum viewed as sufficient guide?	Existing literature and the national English Curriculum
Schools Management type	Government and Private	What are the class sizes in each management type? What is the obvious degree of availability of materials	Will these affect ability to teach and learn in a significant manner?  Motivation of teachers and comfort or otherwise of pupils? Pre-training teacher focus group and classroom observation
The teachers	Qualification and years of experience. Do the teachers have English qualification? Qualification in Education? How many years' teaching experience has the teacher?	Study if the teacher factors have effect on the teachers' effectiveness in delivering the teaching.	Do the teachers think the training in synthetic phonics is a useful one?  How does their knowledge or lack of it affect teachers' ability to teach reading?  Teacher focus groups before and after the intervention. Can teachers compare the proficiency of

			these children with immediate past ones?
The pupils	Note the attitudes of the pupils to learning in the synthetic phonics class and compare with other classes. Observe the amount of group and peer work and compare with the rote learning content. Note the eagerness or otherwise to participate in activities	What is the view of the pupils concerning the synthetic phonics method? Do pupils think they learnt well with the method? Do they enjoy being taught using this method? How do teachers perceive the pupil's attitude to Synthetic phonics? Do they appear more eager to learn in that class? Individual: observation of Pupils in the classroom and pilot pupil letters	Pupil interview, Teacher focus groups
Parents	Parents educational social and economic status		Background questionnaire of pupils.

**Table 3.3 Units of analysis**

### **3.7 The research participants**

The study is a case study/action research design which involves Primary One classes and the site was Bonny Island, Rivers State. The main unit of analysis (Burns, 2001) is the implementation of the synthetic phonics intervention. The study utilises an embedded case study design because there are the private and government schools sub units and the presence of two management types in the research could result in different operational details (Yin, 2009). Treating the case as a holistic unit will result in a lack of clarity in the handling of the data as it will be impossible to examine the differences which may arise as a result of the differing management types. Other major subunits are the pupils and the teachers. It is an action research because it is a collaborative inquiry by the researcher and the practitioners.

Nine primary schools; four of which were government schools and five private were involved in the study which also included 226 pupils and nine teachers.

#### ***3.7.1 Use of two school management types***

Although primary education is free in government schools, in urban and semi urban areas of Nigeria, the majority of pupils are registered in fee charging low cost private schools (Tooley and Dixon 2006).

Parents send their children to government schools only when they cannot afford the fees charged by the private schools (Tooley et al 2005). Even when such fees are unaffordable for the registered and government approved private primary schools, they prefer to patronise the unregistered primary schools. Just as in other peri-urban parts of the country, there are more private than government schools on Bonny Island. This is consistent with the finding concerning Lagos, a metropolitan city in Nigeria: “a large majority of schools is private” (Tooley et al, 2005 p.6).

Some of the reasons for the high patronage of private schools include:

- Accountability – the school management is accountable to the parents
- Regularity in teaching – Teacher absenteeism is reduced to the minimum in private schools



- Examination results – Private school pupils outperform government pupils in national examinations (Adekola, 2007).

In fact, the difference in the achievement level of the pupils is so much that parents would rather have their children attend private schools if they can afford it.

In the light of the foregoing, it seems logical that a study of this nature should include both government and private schools since both together form the majority provider of education for primary one pupils.

### **3.8 Procedure for data collection**

I paid a personal visit to the office of the Director of Education for the Bonny Local Government Area three months before the proposed start of the fieldwork. The purpose was to explain the research and request permission to use some of the schools in the local government. Such a personal visit was necessary because the culture responds better to personal visit than just sending a mail or making phone calls (Twum Danso, 2012). The Director was willing to give me permission to work in the schools but was inclined to seek the opinion of the Secretary of the State Universal Basic Education Board. At the next visit, he confirmed that the Secretary was pleased that I wanted to carry out the intervention in the schools. Permission received, I proceeded to invite Primary One teachers from the eight government schools on the Island to participate in my research work and invited them to a training session in synthetic phonics teaching method. It was then two weeks to the end of the session. The training was to last for three afternoons as the teachers would teach their classes during school hours. In addition to the government schools, I visited eight private schools also and six teachers agreed to participate. These six teachers attended the training. It was not difficult at all to receive the permission of the teachers to participate in the study because they were interested in any method which promised an improvement in pupils' reading skills.

#### **3.8.1 Teacher Training**

Introducing the group of teachers to Jolly Phonics evoked different reactions at the start. Some of the teachers appreciated the method immediately and could recognise how using synthetic phonics could rapidly improve teaching and learning reading skills; others argued that the method could lead to confusion. By the end of the first afternoon though, even those who criticised the method at the start began to soften their stance. By the

third day, they had become converted and even gave hugs to the researcher for a job well done. Giving the training close to the end of the school year gave them room to deliberate on the method and I told them I would contact them at the start of the next school year.

At the beginning of the new session in September 2010, I approached the trained teachers to confirm their agreement to have their classrooms as my research field. I discovered in the government schools that the teacher who came from one of the schools is a primary three teacher; one teacher had been moved to primary four in the new session. This meant that only five of the schools were available for the intervention. Of these five, one teacher was due to go on maternity leave. Eventually, I was left with only two of the teachers from government schools. It was not possible to get an equal number of private control schools as the intervention schools because some of the other private schools either had too few pupils or obviously attracted pupils from higher social background than pupils in the government schools. I found only three private schools which had enough pupils and whose pupils appeared to share similar social background with the pupils in the government schools. As a result, I selected three of the private schools whose number of pupils roughly matched those in the control schools to participate in the study. Although all the private school teachers were still available and willing to participate in the study, three of them were selected on the basis of the stated criteria. These five teachers received one-day refresher training at the beginning of the session. I selected the two government schools from where primary One teachers did not attend the training into the control group. These teachers were informed about the research and were also told that if they were interested in knowing the synthetic phonics method, they would receive the training at the end of the research period. In total, there were nine schools, nine teachers, and 226 pupils. The sampling method was the convenient sampling method as the teachers were already employed by the schools and the pupils were already registered in those schools. It is "...fairly acceptable to use a convenience sample when the chance presents itself to gather data from a convenience sample and it represents too good an opportunity to miss" (Bryman 2008, p.183).

### ***3.8.2 Pre-tests***

The study began with pre-test of pupils in both groups on four tests. Three of the tests were completed on a one-on-one basis, with the other carried out collectively as a class.

The tests were chosen because they have been used in the context of developing countries and have been found to be effective. The tests used were:

(1). Phonemic Awareness Test, Miskin, 2006 (Appendix A). (Modified to include all the 42 sounds as taught by Jolly Phonics)

Each pupil was asked to sound each of the phonemes and digraphs on the worksheet. One mark was given for every sound that was correctly produced.

(2) Oral Blending (Miskin, 2006) Appendix B.

Each pupil was asked to read a list of regular blendable words. The child was required to sound out and then blend the words. One mark was given for every correctly blended word.

(3). Burt Word reading test (1974) Appendix C.

The test comprised of a set of words that are grouped by difficulty (in multiples of five). Each child was asked to read the words. The test stopped when a child got ten words wrong in a row. One mark was awarded for each correctly read word. The marking and conversion for the test is in Appendix D.

(4). Schonell Spelling Test (1952) (Appendix E).

The test comprised of a set of words that are grouped by difficulty (multiples of ten) and read aloud to each class as a whole. Each word was then put in the context of sentences so that the word would be meaningful. Each child wrote the words on a piece of paper given to them. Each correctly spelt word was awarded one mark. Further convention for converting the scores is in Appendix F.

### ***3.8.3 The Intervention period***

At the conclusion of the pre-tests, teaching materials for pupils and teachers were given to the synthetic phonics schools. They began teaching using the method while pupils in the control schools were taught using the traditional method. Teachers in the control schools were not given any training in synthetic phonics. However, I observed some class sessions so as to explore the contrast with the synthetic phonics classes.

Materials given to the synthetic phonics schools were:

## **Pupil materials**

Black and white Jolly Phonics pupil workbooks (Commercially available)

Pupils used other usual writing materials which they already had- pencil and notebooks.

## **Teacher materials**

The materials given to the teachers were:

Scheme of work and

Jolly Phonics sound and song Compact Disk (CD)

I prepared a detailed scheme of work (Appendix G) for the teachers (adapted from Dixon, 2009) to make the teaching work easier and more focused for the teachers using synthetic phonics. This was to reduce the amount of time teachers would spend preparing for each lesson. It was thought to ease their job in this manner because the teachers were yet grappling with the idea of sounds and trying to remember the sounds as different from the letter names.

The scheme of work included teacher and pupil activities centred on the five basic skills.

The activities were proposed in steps as follows:

- The lesson started with a revision of previous sounds taught- all the sounds taught to that point were listed on the scheme.
- The next step was teaching the sound for the day; for this, the sound was written on the scheme, so are the story and action for the sound.
- This was followed by letter formation with a suggestion on how to teach the pupils the movements required to form the letter.
- Next was blending and sounding accompanied by suggested words or phrases or sentences depending on the level of the pupils
- The last item on the scheme was dictation

I provided the scheme because having all that they needed on one page would be helpful to the teachers. Every task for one lesson was on an A4 page and the scheme of work was 42 A4 pages stapled together. The teachers were grateful for the scheme of work.

The Jolly Phonics sound and song CD served as a reminder of the sounds.

In addition, the teachers were given copies of the Jolly Phonics Teacher's Guide. I encouraged the teachers to make flash cards for sounds, words, tricky word cards, and alternative spellings.

### ***3.8.4 Learning***

Lessons were scheduled for three times a week. There were twice-weekly visits to the schools in the first two weeks and after then, the visits became weekly as the teachers became more confident in using the method. The visits, intended for classroom observation, also served as the opportunity for the teachers to ask for clarification where they were unsure of any part of the method including the pronunciation of the sounds. The visits continued till the end of the intervention even when the teachers had become confident in handling the materials because it served as an encouragement to the teachers. Another advantage of the regular visits was that teachers and pupils had become accustomed to the presence of the researcher and so planned classroom observation was less obtrusive. It had become almost normal for the researcher to be around the class.

The pre- and post-test data provides information about two stages in the progression of the research: the pupils' performance at the start of the study and their performance at the end. However, the research was a process and not a set of tests. The post-test took place in March, six months after the pre-test. The timing was to suit one of the tests, the Burt reading test which advises against a repetition in less than six months. Also, reading skills do not develop overnight (Harrison, 2004) and considering that pupils were learning the language at the same time as learning to read, it was important to allow some time to pass before testing the pupils again. The pupils in both synthetic phonics and control schools were given the same test at the post-test as at pre-test. The analysis of the pre and post-tests will be the subject of the next chapter.

### ***3.8.5 The Questionnaire***

It was important to gather information on the socioeconomic/home literacy background of the pupils in the study as part of investigating if, in addition to teaching methods; socio-economic factors may contribute to the attainment of reading and writing skills of the population researched. A pupil background questionnaire was used to investigate the socioeconomic circumstances of the pupils. The questionnaire was adapted from Tooley,

Dixon, and Olaniyan (2005) and EGRA (2009) both of which have been used in collecting similar data in Nigeria.

All the 226 children formed the sample for the questionnaire as they were already a part of the study. This process of completing the questionnaire continued for much of the duration of the intervention. The researcher or her assistance completed the questionnaire with the pupil on a one-to-one basis. The questionnaire feature short and closed questions as those would be easy for children to answer. The questions explored pupil personal information (age, gender); home language practises, parent literacy, availability of literacy support at home (reading books at home, adult reading to the pupil and pupil reading aloud to adult); and socio economic circumstances (availability of certain belongings in the household). (See Appendix H for the questionnaire).

### ***3.8.6 Pupil Interviews***

10 pupils were randomly selected in three of the synthetic phonics schools for interviews. The purpose was to further explore the attitude of the children to the synthetic phonics method. In keeping with the mode of children interviews, the questions were short and semi-closed. The interview was in the form of a casual chat with the researcher whom the pupils were familiar enough with to refer to as 'auntie'. The questions explored these major themes: if they enjoyed learning in their synthetic phonics classes; what they learnt; what they liked best; if they found any part of the subject difficult; and which part if any; and if it has helped them to read. The interview guide is in Appendix I.

### ***3.8.7 Teacher Focus group***

Focus group discussions were used to explore the views of teachers before and after the intervention. The pre-intervention focus group (Appendix J) explored present teaching methods, teachers' views on the rate of literacy achievement; views on reasons why pupils fail to achieve literacy skills, and views on possible solutions to the literacy challenge.

The major issues in the post-intervention discussion guide (Appendix K) were the teaching methods past and current, perceived benefits of the synthetic phonics method to the teachers and to the pupils, perceived disadvantages, and challenges in using the synthetic phonics method and how the issues were or were being resolved. All the teachers

attended the first focus group discussion but one teacher did not attend the second focus group in spite of the due notice they were all given.

### ***3.8.8 Classroom Observation***

A prepared checklist was used in addition to video recording of classroom sessions for the collection of classroom observation data in this research. The video recording was used to freeze typical classroom scenes which would later be watched while the checklist was used to collect information which may be difficult to extract from the video recording. The themes covered by the items on the checklist and revealed by the classroom scene included the teaching of the basic skills, pupil participation, peer work, play, teacher attitude and pupil attitude. (See Appendix L for the checklist).

Each classroom was observed five times. Observations were carried out this number of times in order to adequately note each aspect of the themes identified for observation. The themes were agreed on by my supervisor and me. The teachers were made aware of the themes at one-on-one discussion prior to the start of classroom observation. The multiple sets of observation also helped to reduce the obtrusive effect of direct observation as the teachers and even the pupils became used to having the phonics class observed.

Data generated from the classroom observation was used to explore the attitude of the pupils and to further support evidence of teacher attitude gathered through other instruments. Apart from using the observation data to explore the attitude of pupils and confirm the teacher attitude, the data was also useful in answering the research question- 'how did the teachers implement the synthetic phonics?'

### **3.9 Analysis**

This section presents the methods used in the analysis of the data. The study is a mixed method inquiry using quantitative and qualitative method of data collection to answer the research question: "Can the reading skills of Nigerian pupils improve through the synthetic phonics method?" Six sub-questions were employed in order to collect needed data and for the purpose of the confirmation.

The study is an intervention involving government primary schools on the one hand and private primary schools as a separate group. Each school management type had an intervention group and a control group. Pre and post-test scores were collected from

each group for the purpose of exploring the influence of the intervention on the intervention group. The intervention was carried out by the class teachers. Background data was collected through the use of questionnaires and observation data through classroom observation guide and video recording. Pupil interview was also employed. Furthermore, focus group discussions of teachers provided focus group data. The usage of data and the methods of analysis are now presented.

### ***3.9.1 Quantitative data***

Quantitative data collected through pre-tests and post-tests, background questionnaire, and classroom observation were analysed with the Statistical Package for Social Sciences (SPSS). Each data set was given codes which then facilitated group or individual analysis. The procedure for the analysis is explained below:

Phonemic awareness (Miskin, 2006): The codes reflected the number of phonemes correctly identified.

Blending tests (Miskin, 2006): The codes reflected the number of words correctly blended.

Burt reading test (Burt, 1974): The codes reflected the number of words read correctly. In addition, the procedure for converting from raw scores to reading age was applied in calculating pupil's pre-test and post-test reading ages. (Appendix D)

Schonell Spelling Test (1952): The codes reflected the number of correctly spelt words. The procedure<sup>7</sup> for converting from raw scores to spelling age was then applied in calculating pupil's pre and post-test spelling ages. (See Appendix F)

After the coding process, the test results were tested for statistical differences to answer the main research questions and the sub questions which generated quantitative data. All the test data were subjected to: histogram test, Levene's Test of Homogeneity of Variances, Shapiro-Wilk Test of Normality, so as to determine if the scores were normally distributed or not and if the variances were homogeneous. If the statistics appeared not to be normally distributed, non-parametric tests were employed, specifically the Mann Whitney U, and Wilcoxon Rank Test which compare differences between two independent groups that are not normally distributed (Black, 2002; 2005). A significance

---

<sup>7</sup> The calculation for converting from raw score to decimal spelling age is:  $\frac{\text{Number of Correct Answers}}{10}$



level of  $p=0.05$  was used to determine if the locations of the two distributions are equal (*i.e.*, if the medians are equal) or there is a statistical difference between the two groups. If the  $p$  value is less than 0.05 ( $p<0.05$ ), the result for the variables is said to show statistical significance at a 95% confidence level.

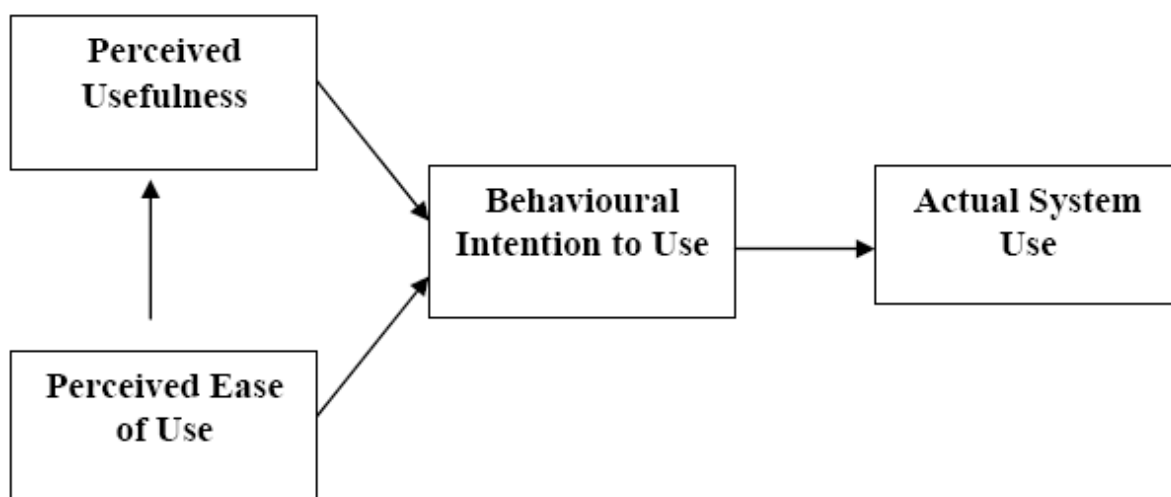
### ***3.9.2 Qualitative data:***

Analysis of pupil interviews was by the themes used in compiling the structured interview (Braun and Clarke 2013).

There are four bases for analysis of focus group data (Krueger and Casey, 2009): transcript-based, tape-based, note-based and memory-based. The analysis used in this study is tape-based transcription supported by notes. I obtained permission from the participants to use a camcorder to record the discussion, a permission which they all willingly granted having been told what use the video would be put to. This eliminated the possibility of forgetting some points as may happen with the memory-based. It also gave room for knowing who said what in case there was a need to contact any of the teachers for a follow up discussion. Audio and video recordings are recognised as valid tools for data collection in educational research (Liedtka 2001). The notes were taken as a back-up in case of lost data as a result of equipment malfunction.

Though software is available for quicker transcription, I decided to do manual transcription as this would afford me the opportunity to interact with the data as much as possible.

The framework adopted for the analysis of the focus group discussion is the Technology Acceptance Model (TAM) (Venkatesh, Davis and Davis, 2003). The model proposes that the intention to use technology and the actual use of technology are determined by the two factors- Perceived Usefulness (PU) and Perceived Ease of Use (PEU). Perceived Ease of Use refers to the user's thought about how easy the tool is to use. PU is the extent to which the user believes that a technological tool is useful towards realising their objective. PU has been found to be the major contributing factor to technology acceptance while the PEU is a secondary consideration (Agbatogun 2011). Figure 4 illustrates the (TAM) Model as adopted in the analysis in the focus group discussion data.



**Figure 3.5: Technology Acceptance Model** (Source: Venkateshet al 2003, p.423)

The attitude of the teachers will be investigated through this model in the hope that it will reveal if they consider the method useful (Venkateshet al 2003) for: improving their knowledge of teaching reading and writing, ease of teaching, teaching with fun rather than with anxiety about and increasing their confidence to teach English, increasing their interest, and making their teaching effective.

Although it is argued that the clarity of interpretation of focus groups is subjective, as it depends on the purpose at hand (Bloor et al 2001) and a change in purpose might lead to different interpretation of the same data, the complicated nature of findings is not a disadvantage of the method but a true representation of the subject matter. For the present research, the purpose remained consistent throughout the duration of the fieldwork and the analysis of the data thereby ensuring a uniformity of analysis.

Classroom observation data was collected by recording one teaching session per teacher, so a total of five classroom observations were video recorded. Like the focus group discussion, the recordings of the classroom were then transcribed and used as the basis for the analysis. A standard transcription method was adopted to avoid researcher's subjectivity which may result in reliability problems. This is a frequently used system adapted from Gail Jefferson (Olcay 2011).

Since the classroom sessions had naturally occurring demarcation occasioned by the different aspects of the reading skills being measured, these aspects of skills formed the

themes for the analysis (phoneme awareness, blending, reading, and spelling). In addition, the 5Ps-Participation, Positive teaching, Pace, Purpose, and Passion (Dixon, 2009) also formed bases of the analysis. These guided the steps which I took through the analysis thus:

- Watching the video clips several times casually observing the pattern of teaching and learning
- Watching the clips more closely and transcribing portions which related to the themes mentioned above.
- More detailed transcription of most relevant cases including nonverbal occurrences
- This was followed by detailed analysis of the segments as they relate to each of the themes.

### **3.10 The interpretation of the findings**

Interpretation of findings is carried out by comparing rival positions of the other method predominantly used in teaching in Nigeria. This is the method referred to as the traditional method in this study. Pupils' baseline and end line reading performance will be compared across the two groups of classrooms studied to arrive at the interpretation of findings.

### **3.11 Ethical Considerations**

Ethical issues concern the researcher's social and moral conduct (Yates 2007). Researchers must come face to face with decisions about morality and expedience and so should make these decisions in advance to avoid succumbing to pressure on the research field. The researcher must anticipate issues of ethics and prepare for them because "fieldwork is constantly ridden by ethical challenges" (Ryen, 2004 p.321). Ethical practice lies at the very heart of research (Payne and Payne 2004) and the researcher must demonstrate that the research is ethical and that all efforts have been made to protect both the researched and the researcher from risk (Marshall and Rossman 2006). As a result of the concern for ethics in research, many research organisations have rolled out agreements on moral practice in social research in recent years.

For example, the British Educational Research Association provides guidelines for educational researchers in order that the researchers, other members of the profession and the public may be protected from unethical practices. BERA, 2011 provided the guiding principles in the conduct of this research.

“Individuals should be treated fairly, sensitively, with dignity, and within an ethic of respect and freedom from prejudice regardless of age, gender, sexuality, race, ethnicity, class, nationality, cultural identity, partnership status, faith, disability, political belief or any other significant difference” (BERA 2011, guideline no.9).

The researcher must research with integrity, ensuring adherence to all laid down procedure. Research must be void of deception (Blaikie, 2010). As such, every attempt was made to ensure respect for all persons and adults involved whether actively or passively. Efforts made to ensure that the research was what it claimed to be to the participants and that the report conforms to laid down principles are discussed below:

### ***3.11.1 Gaining access to participants***

One of the main ethical issues a researcher needs to address is gaining access to participants because the way a researcher gains access to the participants may influence their response to the researcher (Yates 2007). Closely related to this is how one gets past the gatekeepers. A research involving schools and classrooms necessarily required the cooperation of the gate keepers to the school. For the government schools, I arranged a meeting with the key government officials in charge of the local government schools. I gave them a general description of the purpose of the research and how the pupils and teachers might gain from the research and they gave their consent for me to work with the schools. They formed a link to the chairperson of the head teachers, and the head teachers made a link to the teachers. Access through the gatekeepers may affect how the researcher appears to the participants (Yates, 2007) so in this case; all effort was made assure the teachers that the researcher was not an agent of the government. The training period provided an opportunity for close rapport between the researcher and the teachers. This resulted in cultivating a relationship which transcended the source of the link between researcher and teachers. Recruiting the teachers in the private schools was also through the gatekeepers but the link was simpler: from proprietor/head teacher to the teachers. In the same way as the teachers from the government schools, the training period was a period of relationship building. Although this recruitment process involved many levels of consent (Ryen, 2011), the teachers had the option of participating or not and some indeed decided not to participate.

### ***3.11.2 Informed consent***

Informed consent means that the participants must know the nature and reason of the research and must know that they have the right to withdraw at any point in the research (Burns, 2000; Bryman, 2012). The participants must be provided with information concerning the purpose of the research, the researchers, funders, use of data, amount of time required from them, what involvement is required from them, what subjects will be covered. Too much detail may alarm some potential participants or cause them to behave in ways they think the researcher expects thus impacting the quality and usefulness of data collected (Yates, 2007). Because of this, there should be a balance in the amount of information provided. Teachers in this study were informed that the researcher was carrying out the research to determine the possible impact of the synthetic phonics method on the reading attainment of the pupils. Although they were given much detail about the research work, the teachers did not find the information cumbersome unlike the participants in Twum Danso, (2012). We made it clear that this was a part of a PhD research work and had no effect on their job status, positive or negative in line with Dixon's (2003) call for sincerity on the part of the researcher. The researcher should be honest and candid when explaining the reasons for the research and where and how the findings will be used (Dixon, 2003). The teachers were also told that the research would span two school terms, their classrooms would be observed frequently, and they would be required to participate in focus group discussions. I told them that the data will be published publicly in my PhD thesis. Participation was voluntary and they could withdraw at any time if they wished. All the above information was made available in written form to the teachers who took their time to read, sign and later return same to the researcher. However, some teachers preferred giving their verbal consent to signing consent forms. They were quite pleased to participate in the research but they did not want to commit themselves to signing. The researcher had to explain again and again that signing the forms was required by her school before some of the teachers obliged her. For such reluctant teachers, I allowed some time before offering them the forms again by which time they were sure that the forms were indeed meant for the researcher's use only. They then signed the forms. These forms were kept safe and separate from the data. Consent is 'not absolute' but progressive and there may be need for renegotiation in the course of the data collection exercise" (Ryen, 2004). In the course of collecting data, I further

obtained permission to have the data published in any form online or published journal or book.

For school children, consent is needed from parents and from schools and also from the children (Craig and Taylor, 1999). The researcher explained the purpose of the research to the pupils with the help of their teachers. The purpose of the test was also explained to the pupils. All effort was made to ensure that the pupils were not tensed up thinking they were writing school examination while pre- and post- tests took place. The children were also told that they were free to say if they did not want to participate in any aspect of the research. Parents' consent was received through the help of the teachers who informed the parents. In addition, letters were given to the teachers to send home through the pupils. However, the teachers were of the opinion that most parents would not be careful to return the parent's consent form and may expect their silence to be taken as consent. If such happened, it would constitute a challenge to the data collection exercise. They advised rather that the researcher sent an 'opt out' letter to the parents so that any parent who did not want their child to participate would sign and return. The teachers undertook to explain the purpose of the research to the parents. I took their advice as they would know best how parents react to such issues and sent the 'opt out' letters to parents. One parent called me on phone to make further enquiries and to say he was satisfied that the child could participate in the research. No form was returned to any of the teachers.

### ***3.11.3 Self-presentation***

Self-presentation refers to how the researcher presents him/herself to the participants as this involves (Yates, 2007). From the first meeting, I made it clear that I was a research student who was interested in the improvement of literacy skills in pupils. As this has been a continuing passion for me, it has not been difficult at all to maintain one purpose. As many times as I met with the teachers, individually and as a group, I maintained the same purpose: for my research and for the good of the Nigerian child.

### ***3.11.4 Anonymity and confidentiality***

Confidentiality means protecting the identity of participants, the venue and setting of the research such that apart from the research team, no other person knows who the participants are (Lewis, 2007). It implies the elimination from the research records any

item that may reveal the identity of a research participant (Berg 2004). Anonymity means that the participants are nameless and faceless Berg (2004). This is probable in online research with the popularity of online surveys like Survey Monkey but much research still involves the researcher meeting with the participants. The researcher, and in some instances, the assistants to the researcher would know the faces, names, and offices or home addresses of the participants. Apart from this, certain information invariably revealed may make it possible to trace some participants. As a result, in practical terms, anonymity is almost impossible. What remains is for the researcher to provide a high level of confidentiality (Berg 2004).

Real names of the teachers were not used in the storage of the data or in the transcript. I avoided attributing comments to identifiable participants in whatever form so that it will not be possible to identify who the participants are. Pseudo names were used for the teachers so as to be able to trace their information at a later time.

I have made some points in more general ways and edited some details which in no way affect the central data in the report. Tapes and transcripts are video clips are stored separately and I have not given them tell-tale labels. The names of the schools have not been used; rather numerical figures have been used for the schools.

### ***3.11.5 Trust***

Trust refers to the relationship between the researcher and the participants. Both the researcher and the work ought to be seen as trustworthy all through the research process. This is especially relevant when delicate situations are involved. Trust also refers to researcher's responsibility to keep the research field as good as they met it, the need not to destroy the field so that participants will be willing to be involved with other future research. This means also that promises should be kept if any was made to the participants (Ryen 2004, and 2011). I promised the proprietors of the control schools that I would train some of their teachers in the synthetic phonics method. This promise has been fulfilled to all the control schools.

### ***3.11.6 Reciprocity***

Reciprocity means giving back with care. The participants in this research gave their time, adopted a new teaching method as I managed to convince them to try the new method telling them it has been found to be effective, they adjusted to the researcher's presence

for months, and they painstakingly prepared new lesson notes though they had the option of using their previous method. In short, they gave themselves. It was only fair that the researcher gave something in exchange or as compensation for all that the teachers gave. I offered feedback to the teachers after observation sessions, gave time to help out with some large classes, helped with setting of examination questions, offered further training and guidance beyond the period of the research and sent a representative when required at a school's graduation event. I also showed them the report of the research.

To recap, approval for this study was gained from the Newcastle University by following the school's laid down procedure for ethical approval. This entailed completing and submitting the ethical approval form which went through the rigorous screening process and waiting till the approval was granted.

Approval to carry out the study in the schools was obtained from the Zonal Director of the Ministry of Education in Bonny. The informed consent of all participants was sought and gained, and they were all informed about all the details of the research procedure and duration first by verbal explanation and then through letters which explained the purpose and procedures to be used at each stage of the research and the level of involvement expected from them. Participation was voluntary and could be discontinued at any point if any of the participants chose to discontinue. The researcher informed the participants about what use will be made of the information gained from the research. They were told that all efforts will be made to ensure confidentiality by not providing their real names or any other information by which they could be identified.

Thus far, this chapter has discussed the case study/action research methodology for the research and outlined the steps taken to ensure dependability of the work. It has also discussed the ethical issues associated with the research and stated how the work was carried out within the ethical guidelines provided.

The next section presents the extensive pilot study for the research, discusses lessons from the pilot and how these guided the main fieldwork for the collection of data.



### **3.12 The Pilot Study**

#### ***3.12.1 Introduction: The Choice of Finima***

Living in the Finima community exposed me to a group of teenagers who could neither read nor write. Further enquiries revealed that this situation is the norm not only in Finima but in many parts of the country. This led to a desire for improving the literacy level of Nigerian pupils, confirming Mill's (2007) position that teaching is a caring profession.

Finima town was a natural choice for me as it was my home at that time and I had easy access to the children through the church community. The church community is a big community through which one could reach a large segment of the entire community.

#### ***3.12.2 The pilot study participants***

The pilot research participants were pupils in schools in Finima and Bonny whose ages ranged from 5 to 11, which situated them in Primary school year One to Year 6 Six. What they all had in common was a reading skill level that was lower than that expected for their different ages. Some of them attended government schools and some, private schools for the poor which were hardly different from the government schools in the delivery of literacy skills as evidenced by their level of reading skills when they were tested at the start of the pilot. I accepted the children across such age range so as to have enough participants.

#### ***3.12.3 Preparation for the Pilot Study.***

Dr. Pauline Dixon suggested that I use the Jolly Phonics teaching package and since I was not familiar with the method, she offered to teach me how to use JP and Read Write Inc (WRI) materials which she did. She gave me the training manual she developed on JP and WRI, a scheme she used for a 2-day training of literacy teachers. The training was a valuable preparation for the pilot study, and the scheme was very useful not only to me as I carried out the pilot, but also to teachers who later participated in the main study.

#### ***3.12.4 Starting the Pilot***

I had sent a message to the church to invite children who wanted to learn how to read to a lesson starting on the 14th December 2009. Church was a good place for me to start because I already had access to a group of children who I knew would invite their peers from the community. Besides, literacy teaching in churches is expected and accepted

practice (Blake and Blake, 2005). A general invitation was thrown out to the church congregation and their friends and family members in my absence - which meant I got a few more people than I had bargained for. It was no surprise then, when I arrived at the venue on Monday, 14th December, 2009 and there were 51 children. I proceeded with the entry test. The testing was all we could do at the first meeting but we were able to agree on how to proceed with subsequent sessions.

### ***3.12.5 Entry/Intermediate Tests***

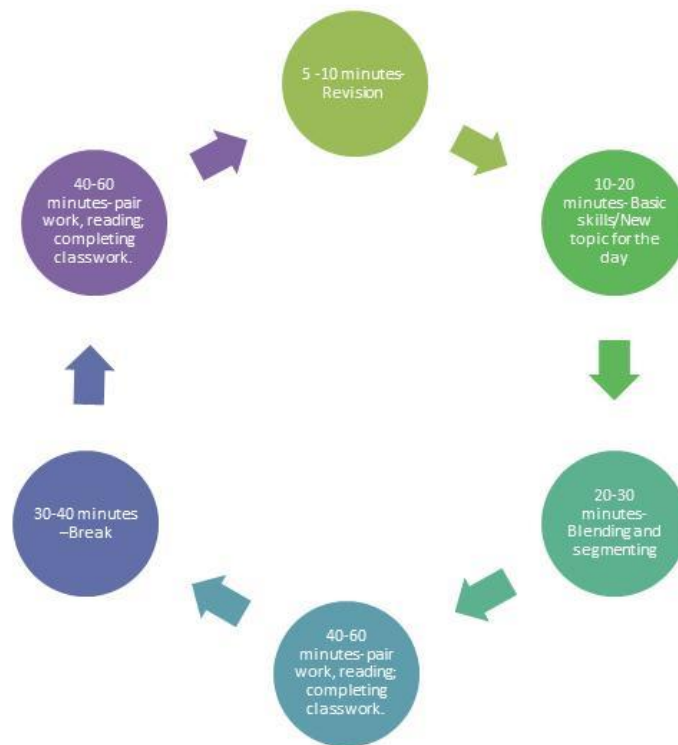
I used Ruth Miskin's test for phonemic awareness to test their knowledge of phonemes; and the Assessment B test to test oral sound blending and the Burt test to assess their reading age.

### ***3.12.6 The Learning Period***

Initially, class time was fixed for 3-5pm and was meant to be on alternate days but at the request of the children, we met daily except on weekends and on Christmas day and New Year day. This was because they found the multisensory approach of Jolly Phonics to be such great fun that there was no dull moment. I said a sound, the children repeated it, I told them a story about the sound, and taught them the action associated with the sound. All this made the learning fun and the sounds easy to remember. The curriculum for the government schools in Nigeria emphasises learning by rote, starting with the letters of the alphabet; as such the children had started their reading career through that method. I wondered if it would be possible for them to add the phonics method to the alphabet learning method as I would not want a replacement of methods but an addition so that what they have learnt previously remains useful while the phonics method serves to speed them up to the desired reading age. Also, they needed to keep the method that the teachers used in school since the literacy scheme was not a replacement but a pilot and the children would continue their academic career in their various schools.

<b>Month</b>	<b>Monthly Focus</b>	<b>Focus</b>
1 <sup>st</sup> Meeting	Pre –Tests for all pupils	Tests in Phonemic Awareness, Oral Blending, Burt reading and Schonell spelling
Weeks 1-2	Introduction to sounds with stories and mnemonic actions; shifting attention away from letter names. Taught consonant/vowel snaps	s,a ,t, i, p, n sa, si, ta, ti, pa, pi, na, ni
Weeks 3- 4	Introduced 1 or 2 new letter sounds per lesson. Each lesson began with revision of the previous sounds. Introduced blending of two letter words- at, it	ck, e, h, r, m,d g,o,u,l,f,b
	Introduce more letter sounds Blending cvc words and words with double consonants Blending words with vowel diagraphs	ai,j,oa,ie,ee,or z, w,ng,v,oo,oo sack, kiss, fill boat, corn
Weeks 5-12	Revised letter names (pupils knew them already) Introduced Tricky words Introduced consonant clusters (blends) Introduced decodable readers	y,x,ch,sh,th,th qu,ou,oi,ue,er,ar
Weeks 13-16	More of Tricky words and consonant blends Introduced ‘magic e’ and alternative spellings Pupils read decodables and began reading other books	
Week 17-23	More alternative spellings, tricky words. Gave pupils writing assignments, encouraging independent writing. More decodables and non-decodables	
Week 24	Post- Tests for pupils	Phonemic Awareness, Oral Blending, Burt reading and Schonell spelling

**Table 3.4: Outline of the pilot from pre-test to post-test**



**Figure 3.6 The daily teaching routine**

The break period was so essential to the lessons that an excerpt from the teacher’s journal reads: “when children are given time off, they often resume with excitement and greater commitment”.

At the beginning of the first week, I told them about sounds and letter names pointing out to them that they already knew the names and telling them the importance of knowing the sounds.

Each lesson began with pupils sitting facing the researcher. The first lessons started with telling a story which included several words beginning with the sound of the day. This led to telling the pupils the sound and showing them the written form on the flash card. By the second week, in line with the principles of guiding the pupils to their zone of proximal development, I started with stories but I encouraged the pupils to deduce the sound for the day from the frequency of its occurrence in the words of the story. Pupils were often able to work out the sound. I introduced them to identifying sounds in words doing the thumbs up or down game. Daily revision of sounds was carried out either by the researcher where the pupils chorused the answer, or in pairs where pupils role–played and each partner played the teacher in turns.

I thought there was no need to teach the pupils letter formation because they all knew how to write the letters and so decided to save time for other aspects where the children were deficient.

Blending was delayed till the third week because the pupils were at first confused between the letter sounds and the names which they were already used to. By the third week, the pupils had become accustomed to the sounds and they struggled less with letter names. The older ones especially had difficulty blending because they would rather guess the word on the flashcard than try to blend the sounds but they later got over the difficulty and started blending. The younger ones blended with greater ease than the older ones did at first because they had not yet memorised many of the high frequency words which they are usually taught in school. By the time the pupils started blending, the sitting arrangement became much more flexible because there was more of partner work and group tasks. I gave word cards to pupils in pairs and their task was to work out the word by sounding and blending. Sometimes, I gave a number of word cards to a team of pupils and it became a healthy competition which team would be able to sound and blend all their words. The ZPD theory was at work then also as children learnt more with the assistance of peers.

I taught them the 'silent blending' game which enabled them to use the action to remind themselves of the sound and I started withdrawing the action tool gradually as soon as they started blending. At the end of three weeks, they were able to blend three and four letter words.

I found it interesting that though I did not tell them that they all scored zero in the phonemic awareness aspect of the pre-test, the children realised this by themselves and one of them said to me; " we scored zero in that test, bring it again and we will show you". At this point, I knew that they had truly learnt. The intermediate test was therefore 'on request' by the children. The pupils had scores of between 13 and 29 out of a total of 31 sounds which had been taught by then.

In the third week, I employed a research assistant, whom I trained in the use of Jolly Phonics strategy. She observed the class while I taught and started teaching them before I left for Newcastle in the New Year. I left her video recordings of the classes I had taught

earlier and a complete video recording of the 7 books of the Jolly Phonics as a further guide to her teaching.

When schools resumed in the New Year, lesson days were reduced to 3 times a week so that the pupils would be able to spend time on other school commitments. I kept in touch with my research assistant by regular phone calls. The phone calls served as our times of exchanging views about the learning styles of the children, evaluating what worked or what did not in the classroom, and collaborating on possible next steps. I made a trip over the Easter holidays in March, 2010 during which time I observed some teaching sessions and also taught some sessions. My research assistant and I gave feedback to each other and decided on some possible steps to improve the teaching and learning process thereafter.

The introduction of alternative spellings and tricky words meant the children had access to a greater range of words and they could start reading a wider range of decodables. Soon they were writing independently and some of them decided to practice their writing on me by writing me letters (Appendix M). They also started reading non-decodables.

### ***3.12.7 Classroom structure***

The way the classroom is organised is important to learning as Lemke (2002, p.36) states: “participation in meaningful activities is not just what we learn, it is also how we learn”. Although every session began with students facing the blackboard and the teacher standing in front, the classroom structure was flexible. Reflecting the teacher’s belief that learning is co-constructed between the learners and the teacher, the class often broke up into pairs and group work while the teacher moved around guiding the group work or sat at her desk, casting occasional glances around the classroom; acting as the more knowledgeable adult helping the children navigate towards their “zone of proximal development” Vygotsky (1978, p.79).

The sitting arrangement easily changed into circular or semi-circle with the teacher sitting in among the pupils when necessary. At the end of group or pair works, the teacher elicited responses from the pupils who were often so eager to speak that the orderliness of raising their hands to answer questions became difficult to achieve. The pupils were capable of negotiating the direction of learning showing that not only teachers can control events in classrooms buttressing the assertion, “The fact that teachers may have to

impose order is evidence enough that learners too have a role in controlling events, initiating and responding to ongoing activity” (Wright 2006, p.70). The pupils were thus allowed to control events at such times at the risk of manageable degrees of disorderliness as long as learning was still able continue. Wright (2006) posits that disorderliness may not necessarily hamper learning. This does not imply that disorderliness was allowed to take over the classes as we insisted on reasonable levels of orderliness.

### ***3.12.8 Researchers’ learning experience***

Though classroom observation is intrusive (Wallace, 1998), the research assistant and I have built a partnership with each other, which was recognised by the students, and this made our observation of each other not intrusive but more like partner work - one of the methods the pupils often used when working on tasks. I could be observed by her and I observed her most naturally. We did this often and compared notes on our observations and together, we kept refining our methods. The classrooms, for us, had indeed become the laboratories where we studied the learning process (Wallace 1998). It was not strange to the pupils when a colleague who taught in a nearby school came in to observe me, the children did not even notice the presence of the stranger. This enabled the children to carry on as usual; however, I was conscious of being observed. Curiously, being observed encouraged me to be more learner-centred than I used to be as I involved the children more, so they did much of the talking. This helped me to realise that I had not practiced my belief in engaging the pupils as much as I thought I did. I was on the path to improvement though. The immediate result was that learner talk, which we thought was much, became even more as the observation revealed insufficient learner talk. Engaging the learners and giving them much room for interaction facilitates the acquisition of a second language (Walsh, 2006). When teacher talk dominates the teaching session, the classroom ceases to be an avenue where “teachers and learners, co-construct (plural) contexts” (Walsh 2006, p.16). We involved the pupils more and designed more ways of making the classes engaging.

### ***3.12.9 Reflections on action***

One of the advantages of action research is that insights gained from data collected feeds back into the reflective cycle (Wallace, 1998). Thus we realised that it was necessary to give the children days off. Reflecting on the above, it could also be that the children had

errands to run at home; the Saturday lessons were thus cancelled. This is a clear example of the freedom we had to make decisions. If we tried a pattern and it failed to give the desired result, we repeated the process using other methods till we arrived at a desirable end. Wallace (1998, p. 22) discusses the boundaries of decision-making; some of the decisions we made were possible because we were the ‘policy makers’ and had the liberty to ‘move things around’. However, we used this liberty within reasonable limits and with a great sense of responsibility as we wished to develop a model which could be a guide for us when supervising the implementation of the intervention in the government and private schools during the main field work. We were conscious of the fact that such flexibility would not be easily achievable in those schools. Also, as noted by Wallace (1998, p.22), every teacher has some levels of decision making which may be a result of “personality traits or the degree to which the teacher flouts the ‘rules” (1998, p.22).

We were conscious of our practice and the need to continue to improve our instruments and our method. I hoped to come up with a model which the teachers who would participate in the intervention can find useable. I even hoped that I could develop a model which could be successfully applied in many other places in Nigeria. This desire stemmed from the fact that the challenge of poor reading skill is not localised to Finima/Bonny but is country wide and a successful intervention on the Island could serve as a model in other parts of the country.

### ***3.12.10 Test results and analysis***

We conducted the exit test in June, 2010. All pupils knew all the sounds by the end of 12 weeks so it was not necessary to test their knowledge of sound in the 24th week.

The exit test was based on the Burt reading test. The analysis was carried out by coding the reading age scores (Appendix D) into SPSS. Following are the test results and analysis.

Variable	Test	Mean	SD	Min.	Max.
Burt reading age	Pre-test	64.21	2.12	60	77
	Post-test	94.54	23.12	69	145

**Table 3.5: Pretest and Posttest reading age in months**



Table 5 shows the mean of pre-test reading age in months as 64.21. The minimum - reading age was 60 months and the maximum was 77 months. Table also presents the mean of post-test reading age as 94.54 months.

After the 6 month intervention, the minimum reading age was 69 months, showing a 9 month increase while the maximum reading age had risen to 145 months, 68 months increase. The mean gain in reading age was 30 months as shown in Table 7 below.

---

Mean	30.32
Median	23.00
Minimum	9
Maximum	68

---

**Table 3.6: Reading age gain in months**

The paired sample t-test shows that the children’s reading improved significantly when compared to the pre-test scores. The mean gain of 30 months in six months of intervention was significant at p=0.00.

---

	Mean	t	df	p
	30.32	8.71	27	.00

---

**Table 3.7: Gain in reading age in Months**

### ***3.12.11 Lessons from the pilot***

Pupil participation enhanced pupil learning. The pupils benefitted from being engaged rather than listening passively.

Because of the lack of emphasis on letter formation, the pilot did not improve the pupils’ handwriting. Their handwriting showed less maturity than their reading and vocabulary skills as can be seen in their letters (Appendix M). It became obvious to me that learning to read and developing handwriting should go hand in hand and I decided to make letter formation an important part of the main study.

Games and role playing was a very effective means of achieving pupil participation in the reading classes and much of this was taught to the Primary One teachers. Although the ‘silent blending’ game served as a good reminder of the sounds, it hindered smooth blending because pupils thought they must first complete the actions before sounding out

the words. In fact, a teacher who taught some of the children in school acknowledged that the children had become better readers than their colleagues in the school. But she wondered why they first performed actions as if they were deaf and dumb before they could read words. As a result of this, the silent blending game was removed from the games taught to the teachers who would carry out the intervention.

Pair work and team work was found to stimulate student learning so the teachers were encouraged to include much of this in their teaching session.

The pace of the teaching especially of sounds was important because if it is stretched for too long, children may become bored with the stories and actions as they grow older (by months). It is advisable for teachers to teach the sounds at a pace that pupils can accommodate and not at a slower pace (Dixon, 2009).

### ***3.12.12 Post Pilot***

The learning time was fun for the children as it incorporated partner work, group work, quizzes and inter-group competitions. It was very interactive and it was difficult to know if there was a child who could be described as a quiet student as they all participated actively. The children were often reluctant to leave at the end of the day's session. After the exit test, the pupils were not happy that the session was ending and they made this known to me. Also, during one-on-one chat when I thanked parents for allowing their children to participate in the study, many parents expressed the desire to have the classes continue saying it had been very helpful to the children. A teacher from one of the primary schools called at the study centre to say many of the children were in different classes in her school and that they stood out from other pupils in all the classes. Such comments as the preceding made it difficult to wind down the classes so my assistant continued teaching them and many of the children stayed on for another two years and became avid readers. Other children joined and new classes began at intervals. Adults also came requesting to be taught; some of them were parents of the pupils in the pilot. The result is that the pilot study became a charity named Hope Alive Foundation for Literacy and Development which now has two after school classes in Bonny Town, four in Finima town, and one in Phillip's Town. Also, the parents of some of the children, who themselves could neither read nor write, requested for literacy classes and so there have been vibrant adult classes. Some of the adults have become good readers and stopped

coming while at the time of writing up this research, another group of fifteen women who constituted the second batch of adults have made significant progress in the literacy class.

### **3.13 Conclusion**

This chapter discussed the case study/action research methodology for the research and outlined the steps taken to ensure dependability of the work. It also discussed the ethical issues associated with the research and highlighted how the work was carried out within the ethical guidelines provided. It concluded with a review of the extensive pilot research which preceded the main research.

The next chapter will focus on the analysis of the data obtained from the main fieldwork.

## **Chapter Four. How much can synthetic phonics do? A six-month exploration**

### **4.1 Introduction**

As earlier stated in chapter one, the aim of this study was to investigate the influence of the synthetic phonics method of teaching reading skills on the reading ability of Primary One pupils in Nigeria. Therefore, a major focus of the work was to find out whether the introduction of synthetic phonics method would have remarkable influence on Primary One pupils' reading skills when compared to the teacher's use of the traditional method.

This chapter therefore presents the results and the interpretation of the analysed data which compared the reading skills scores of pupils who were taught using the synthetic phonics method with those taught using the traditional method; both in the government and the private schools. The quantitative data for the assessment of pupils' reading skills in phoneme awareness, blending, Burt reading, and Schonell spelling, presented in this chapter were gathered through Ruth Miskin's phoneme awareness test, oral blending test, Burt reading test, and Schonell spelling test. All tests were administered to both the synthetic phonics group and the group of pupils taught with the traditional method which will henceforth be referred to as the control group.

### **4.2 Research question**

The main research question is: "Can the reading skills of Nigerian pupils improve through the synthetic phonics method?"

The results and interpretations presented in this chapter attempt to provide answers to the sub research question 1. Is there any statistically significant difference in the improvement in the reading skills of pupils taught with synthetic phonics and those taught using traditional methods?

As stated in Chapter 3, it was pre-determined to treat the two school management types as embedded units each justifying a separate analysis. The reason for this is that the private and government schools sub units operate under different management styles resulting in different operational details. Treating the case as a holistic unit may result in a lack of clarity in the handling of the data as it will be impossible to examine the

differences which may arise as a result of the differing management types and operational details. Also, as discussed in Chapter Two, it is widely known from research and from general examination results that the private schools pupils record better achievement than those in the government schools.

Although this chapter focuses on Question 1, in order to appropriately pool the findings from the different data sets together and to achieve coherence in answering the research questions, answers to some of the other questions were inevitably also presented in this chapter.

### **4.3 Findings**

#### ***4.3.1 Description of samples***

This section presents information on the schools, teachers and pupils in the sample. Thus, it includes school vignettes, teacher data, and also the demographic information of the pupils (age and gender) as well as pupil background information. Pupil information is presented in the last part as it leads on to the analysis of pupils' test results.

All the schools, government and private, are in purpose built buildings. All the government schools (Schools 1, 2, 6, and 7) and 2 of the private schools (Schools 8 and 9) are somewhat removed from the residential houses in the immediate neighbourhood though they are not completely shielded from passers-by. However, the other three private schools (Schools 3, 4, and 5) are not isolated from the neighbourhood but are easily accessible to the happenings in and around the school buildings. One could see pupils looking out at passers-by or the other way round from within their classrooms. The government schools have big classrooms furnished with desks and seats. Each set of desk and chair seats two pupils all facing the blackboard and the teacher. The seating arrangement in the private schools was similar but the classrooms were much smaller. This may be partly because the private schools expected fewer pupils. Nonetheless, the classrooms were generally rather small for the number of pupils in the classes. In the government schools, as well as in the two private schools (Schools 8 and 9), the classrooms were separated from other classrooms by concrete walls but in the other private schools (Schools 3, 4, and 5), the classrooms were separated from other classes by light make-shift boards. The voice of the teacher in one class could be heard from

the other class. In private schools (3, 4, and 5) there were no window panes or doors and what were once louver blades in some classes had all broken or fallen off. In the government schools, there were doors and louvers though some had broken off. All the pupils in the synthetic phonics schools had copies of the black and white Jolly Phonics workbook, provided by the researcher. In addition, pupils in private schools had textbooks and notebooks and pencils. Pupils in the government schools hardly had textbooks and some of them did not have enough notebooks for all the subjects. Although education is free in the government schools and textbooks are meant to be provided free for the pupils, the unofficial complaint is that the books provided by government are locked up in some office rather than distributed to the schools and so such books are not available to the pupils.

While the official policy stipulates that the local indigenous language should be the language of instruction until primary four, all schools taught the entire curriculum in English. The only time another language was used was during the period called 'Mother Tongue'.

### **School Vignettes**

There were nine schools in the study. Four of the schools are government schools and as such, not fee charging as all government schools offer free education. However, pupils are occasionally required to pay for certain items. Text books and workbooks and writing materials are also meant to be provided by government but this is not always the case. Many pupils lack workbooks and text books. The private schools charge fees between N5,000 and N12,000 (equivalent to £20-£44). This shows that they are low fee charging schools. In spite of the low amounts charged by the schools, parents often have difficulties paying the fees which come up every three months. There are reported cases of parents who owe fees in one school and move their children from such schools to other schools in order to avoid paying the accumulated fees. All this underscores the fact that the pupils' parents are low income earners who would have benefited from the free education offered by government schools.

Schools One to Five are the synthetic phonics schools while schools Six to Nine are the control schools.

As mentioned in Chapter Two, all teachers in the government schools have qualifications in Education but the private schools present a mix of qualified and non-qualified teachers.

In summary, all the teachers were females of between 22 and 50 years of age. One of them has a Bachelor's degree, five of them have NCE, one has a diploma in education, and two have SSCE. Their years of experience ranged from one to twenty. Table 8 below shows a summary of the school and teacher data.

School	Management	Year Founded	Fee	Government approved	No of Pupils	Number of classrooms	No of teachers	Teacher age	Teacher qualification	Teacher Experience
1	Government	1956	Free	N/a	333	8	10	45-50	NCE	20
2	Government	1904	Free	N/a	700	16	12	36	NCE	1
3	Private	2004	£20-24	No	150	9	14	26	NCE	8
4	Private	1994	£24	No	80	8	8	22	SSCE	4
5	Private	2002	£20	No	77	6	5	23	SSCE	7
6	Government	1983	Free	N/A	600	13	12	36	Diploma	1
7	Government	1947	Free	N/A	714	20	13	29	NCE	5
8	Private	2001	£32	No	215	9	13	30	NCE	5
9	Private	2007	£36-44	No	170	9	12	29	Bachelors	5

**Table 4.8: School and teacher vignette summarised**



## Pupils

There are 154 pupils in the government school sample: 84 males and 70 females. In the private schools sample, there are 72 pupils: 40 males and 32 females.

In the government schools, 16 pupils, representing 10.4% of the pupils are four years old and 58 pupils, representing 37.7% are five years old. There are 48 (31.2%) six year olds. There are 20 (13%) seven year olds, nine (5.8%) eight year olds, and three (1.9%) of them are nine year old.

In the private schools sample, six pupils, representing 8.3% of the pupils are four years old; 31 pupils, representing 43.1% are five years old. There are 28 (38.9%) six year olds. Three (4.2%) are seven years old. One pupil (1.4%) is eight years old, and three (4.2%) of them are nine years old.

In both management types, the ages of pupils are between four and nine, with the majority in the five and six year's age group. This should be expected as that is the age range for Primary One pupils in Nigeria.

School management type		F	%
government	4	16	10.4
	5	58	37.7
	6	48	31.2
	7	20	13.0
	8	9	5.8
	9	3	1.9
	Total	154	100.0
private	4	6	8.3
	5	31	43.1
	6	28	38.9
	7	3	4.2
	8	1	1.4
	9	3	4.2
	Total	72	100.0

**Table 4.9: Age of pupils**

### 4.3.2 Background information of all pupils (government and private)

It is expected, based on existing literature that scores from the two school management groups would differ in favour of the private school and so it was proposed to analyse data from the two school management groups separately. However, it was necessary to first confirm this supposition that scores from the two school management types require separate analysis in this study. To achieve this, first, I analysed the background information of the pupils in the two samples. This included information regarding parent literacy, parent employment circumstances, availability of reading books apart from school textbooks in pupils' homes, and availability of assistance for reading at home. The reason for this was to explore if there a difference between socioeconomic and educational background of the pupils enrolled in each school type. In addition, pre-test data of all pupils from the two school management types were subjected to descriptive analysis and test of significance. The results are shown below, first the background details, followed by the analysis of pre-test scores.

		school is government or private		Total
		government	private	
pupil's mother is literate	No	22 14.3%	3 4.2%	25
	Yes	132 85.7%	69 95.8%	
Total		154	72	226

Chi-Square=5.10, df=1, p=0.02

**Table 4.10: Pupil's mother is literate**

From the government school, 85.7% of the children had literate mothers while 14.3% did not. The corresponding percent for the private school are 95.8% and 4.2% respectively. Chi-square analysis indicates that there is a statistically significant association between mother literacy (no or yes) and school type (private or government) with a chi-square value of 5.10, df of 1 and p of 0.02 (<0.05). A higher proportion of pupils from the private schools had literate mothers compared to the proportion from government schools.

		school is government or private		Total
		government	private	
Pupil's father is literate	No	27 17.5%	3 4.2%	30
	Yes	127 82.5%	69 95.8%	196
Total		154	72	226

Chi-Square=7.61, df=1, p=0.00

**Table 4. 11: Pupil's father is literate**

82.5% of the pupils in the government schools had literate fathers while 17.5% did not. The corresponding percentages for the private school are 95.8% and 4.2% respectively. Chi-square analysis indicates that for father literacy, there is a statistically significant association between father literacy (no or yes) and school type (private or government) with a chi-square value of 7.61 df of 1 and p of 0.00 (<0.05). A higher proportion of pupils from the private school had literate fathers compared to the proportion from government school.

		school is government or private		Total
		government	private	
pupil has private lessons after school	no	85 55.2%	37 51.4%	122
	yes	69 44.8%	35 48.6%	104
Total		154	72	226

Chi-Square=0.29, df=1, p=0.60

**Table 4. 12: pupil has private lessons after school**

From the government schools, 44.8% of the children attended private lessons after school lessons while 55.2% did not. The corresponding percentages for the private school are 48.6% and 51.4% respectively. Chi-square analysis indicates that there is no statistically significant association between attendance at private lessons (no or yes) and school type (private or government)

The chi-square value was 0.29, df of 1 and p of 0.60 (>0.05). Similar proportions of pupils from the private school attended private lessons compared to the proportion from government school.

	school is government or private		Total
	government	private	
Pupil had previous education no	32	6	38
	20.8%	8.3%	
yes	122	66	188
	79.2%	91.7%	

Chi-Square=5.43, df=1, p=0.02

**Table 4. 13: Pupil had previous education**

From the government schools, 79.2% of the children had previous education while 20.8% did not. The corresponding percent for the private school are 91.7% and 8.3% respectively. Chi-square analysis indicates that there is a statistically significant association between previous education (none or yes) and school type (private or government) with a chi-square value of 5.43, df of 1 and p of 0.02 (<0.05). This result indicates that a higher proportion of pupils from the private schools had previous education compared to the proportion from government schools.

	school is government or private		Total
	government	private	
Pupil has reading books at home no	69	12	81
	44.8%	16.7%	
yes	85	60	145
	55.2%	83.3%	
Total	154	72	226

Chi-Square=16.89, df=1, p=0.00

**Table 4. 14: Pupil has reading books at home**

In the government school sample, 55.2% of the pupils had reading books at home (apart from school textbooks) while 44.8% did not. The corresponding percentages for the private school are 83.3% and 16.7% respectively. Chi-square analysis indicates that there is a statistically significant association between availability of reading books at home (no or yes) and school type (private or government) with a chi-square value of

16.9, df of 1 and p of 0.00 (<0.05). A higher proportion of pupils from the private school had reading books at home compared to the proportion from government school.

		school is government or private		Total
		government	private	
Someone reads to the pupil at home	no	86 55.8%	23 31.9%	109
	yes	68 44.2%	49 68.1%	117
Total		154	72	226

Chi-Square=11.22, df=1, p=0.00

**Table 4. 15: Someone reads to the pupil at home**

44.2% of the pupils in the government school sample had had someone who read to them at home while 55.8% did not. The corresponding percentages for the private school are 68.1% and 31.9% respectively. Chi-square analysis indicates that there is a statistically significant association between someone reading to the pupil at home (no or yes) and school type (private or government) with a chi-square value 11.2, df of 1 and p of 0.01 (<0.05). This means that a higher proportion of pupils from the private school were read to at home, compared to the proportion from government school.

		school is government or private		Total
		government	private	
pupil reads aloud to someone at home	no	97 63.0%	40 55.6%	137
	yes	57 37.0%	32 44.4%	89
Total		154	72	226

Chi-Square=1.14, df=1, p=0.29

**Table 4. 16: Pupil reads aloud to someone at home**

37.0% of the pupils in the government school sample read to someone at home and 63.0% did not. The corresponding percentages for the private school are 44.4% and

55.6% respectively. Chi-square analysis shows that there is no statistically significant association between pupil reading aloud to someone at home (no or yes) and school type (private or government) with a chi-square value 1.14, df of 1 and p of 0.29 (>0.05). Similar proportions of pupils from the private school read aloud to someone at home compared to the proportion from government school.

The foregoing analysis reveals that pupils in private schools had more favourable circumstances which could enhance achievement of reading skills for the pupils in those schools when compared to the pupils in the government schools. In five of the seven factors (mother literacy; father literacy; previous education; availability of reading books at home; and availability of someone to read to the pupil at home) examined, pupils in private schools were at an advantage over the pupils in the government schools. In the two other factors, though the pupils in the private schools were ahead of the pupils in the government schools, there was no significant difference.

Furthermore, a descriptive analysis of the pre-test scores of all pupils in the sample indicated that pupils in the private had higher scores on the average, compared to the pupils in the government school.

#### ***4.3.3 Descriptive analysis of sample***

Test	Management	N	Mean	SD	Min	Max
Phoneme awareness	government	154	.32	1.74	0	20
	Private	72	4.65	6.31	0	24
Blending	government	154	.14	1.24	0	15
	Private	72	1.71	3.71	0	20
Burt	government	154	61.33	2.50	0	74
	Private	72	66.42	6.00	0	78
Schonell spelling	government	154	60.36	1.36	0	74
	Private	72	64.06	3.57	0	94

**Table 4. 17: Descriptive statistics for the sample**

To begin with, the data in Table 17 lends support to the claim in the literature, news headlines and blogs, that the reading skill of pupils is poor. Despite the fact that 79.2% of the pupils had pre-school education, most of them had a zero score in phoneme awareness. The maximum score was 20 in the government schools. The high score (20) was attained by just one pupil while the others were largely between 0 and 5. The mean score for the government schools was .32, standard deviation 1.74. 135 pupils (87.7%)

scored zero, a total of 15 pupils had scores of between 1 and 6. A lone star had 20. The figures were higher in the private schools and the spread was wider. However, the maximum score was only 24 of 42 possible scores. The mean score was 4.65, Standard deviation 6.31. 27 pupils (37.5%) scored zero.

In blending, 97.4% of the government school pupils had zero. 19 pupils (11.7%) had between 1 and 3, and the same exceptional pupil had 15. The mean score was .14 and the standard deviation was 1.24. Again, the private school had a slightly wider spread; 40.5% of the pupils had scores between 1 and 20. The maximum score was 20, the mean was 1.71, and the standard deviation was 3.71.

The mean reading age of the pupils in Burt reading was 61.33 and the standard deviation was 2.50. 113 of the pupils in of government schools (73.4%) had zero score placing them at 60-month reading age. 40 of them (26%) were between 62 and 69 months and again, the outstanding pupil was at 74 months. In the private schools, 29.2% of the pupils were at 60 months Burt reading age, 69.4% had between 63 and 78 months and one pupil had 94 months. Their mean reading age was 66.42, standard deviation was 6.0.

135 of government school pupils (87.7%) scores zero in the pre-test Schonell test. This placed them at 60 month reading age. (11.7%) 19 of them were between 61 and 66 months while the high scoring pupil was at 72 months spelling age. Their mean spelling age was 60.36; standard deviation 1.36. Also, 23.6% of private school pupils had zero in Schonell spelling so were at 60 months spelling age. The rest had reading ages between 61 and 71 months. Their mean reading age was 64.06, standard deviation 3.57.

The mean reading age of the pupils in each school management type was 67 months. The mean reading age in each group was lower than the mean chronological age even if one discounted the fact that each of the groups had a very high scoring outlier (74 months in government, and 94 months in private schools). Similarly, the mean spelling age for each of the two groups was lower than their mean chronological age.

The data in Table 17 shows that the pupils in the government schools not only scored less than pupils in the private schools but their standard deviation was smaller showing that the scores in the government schools were close to the mean. Only few pupils had

the high scores hence the scores were much closer to the mean than were the scores in the private schools. The private schools scores spread out over a larger range. This result is consistent with literature that assert that pupils in low cost private schools perform better on the average than pupils in government schools (Dixon, Tooley and Olaniyan, 2005).

At the pre-test, each school management type showed the presence of a single highest scorer. In the government schools, one pupil had scores which were far above all the others in the four tests giving rise to a high maximum score in each of the aspects tested. The mean score of pupils in the private schools were by far higher than those of the pupils in the government schools in all the tests.

To determine if this difference in scores was significant, the scores of the pupils were further subjected to Independent T-tests. When considering our data and using an independent t-test we found that there was a statistically significant difference between private and government schools in all tests. So for example in phoneme awareness  $t=-5.73$ , Mean difference=4.34,  $p=0.00$ ; blending  $t=-3.51$ , Mean difference=1.57,  $p=0.00$ ; Burt  $t=-6.92$ , mean difference=5.09,  $p=0.00$ ; Schonell  $t=-8.52$ , mean difference=3.69,  $p=0.00$ . This is shown in Table 18.

Test	t	Mean diff	p
Phoneme awareness	-5.73	-4.34	.00
Blending	-3.51	-1.57	.00
Burt	-6.92	-5.09	.00
Schonell	-8.52	-3.69	.00

**Table 4. 18: Group Statistics Independent Sample T-Test of both groups**

The disparity in the baseline results of the two school management types supports the postulation made from existing literature that private school pupils tend to perform better on the average than government school pupils. In the data there were so many statistically significant differences with the baseline testing and the family background of children in government and private schools. This led to the decision to look at



comparing private intervention versus private control and government intervention versus government control. Although instigating a multi-level modelling may have aided the comparison of the two differing groups, as this is a mixed method thesis it was felt that comparing like-with-like for the quantitative part would be more beneficial.

Therefore in the next section of this chapter, in examining the research questions, data are analysed separately for the different school management types. Where possible, results are presented next to each other for the pupils in the government schools and the private schools. Where this is not practical, they are presented separately.

#### **4.4 Research question 1**

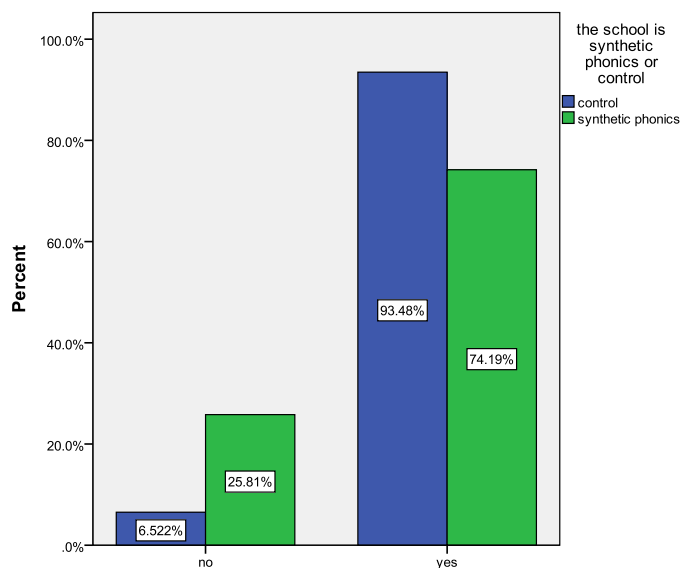
Is there any statistical significant difference in the improvement in the reading skills of pupils taught with synthetic phonics and those taught using traditional methods?

To answer this question, it seemed appropriate to explore the background information of the pupils by school management type in order to verify if the pupils in each school type were of similar socioeconomic background. This is followed by the descriptive statistics of pupils' pre-test scores.

The analysis of pupil background reveals that contrary to the situation between private and government schools where five of the seven factors examined under background information of pupils were statistically significant in favour of the private school pupils, there was not that much difference between the synthetic phonics and the control groups within each school management type. Only parent literacy was of statistical significance and that in favour of the control group of the government schools, all other factors were similar for control and synthetic phonics group. In the private schools, there was no significant difference between the background of pupils in control and synthetic phonics groups. This can be seen in the following analysis.

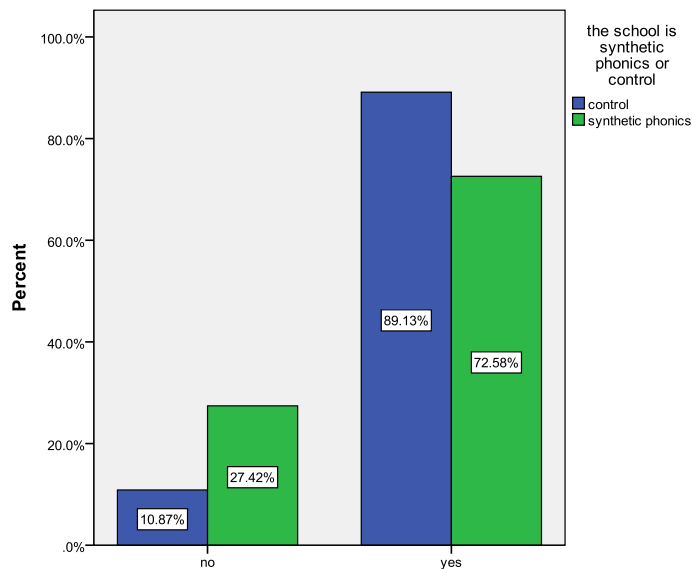
#### 4.4.1 Background Information by school management type

##### Government schools



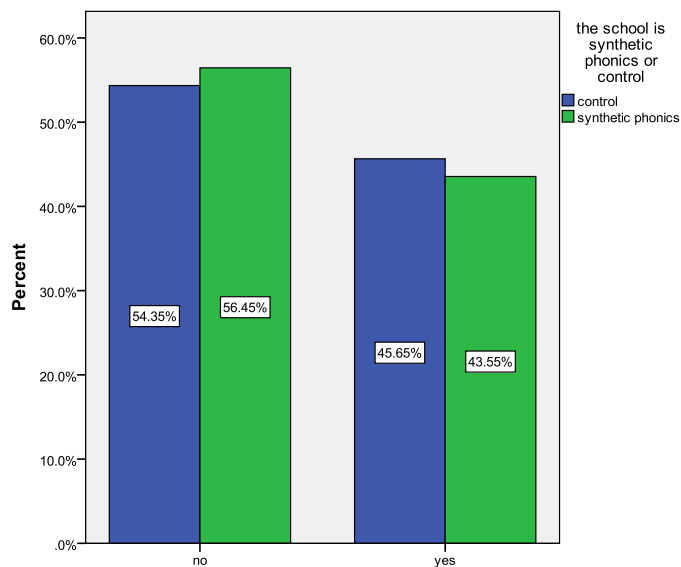
**Figure 4. 7: Mother literacy**

Figure 7 shows that pupils in the control group of the government school sample had a higher percentage of literate mothers than the pupils in the synthetic phonics group. Chi-square analysis indicates that there is a statistically significant association between mother literacy (no or yes) and group type (synthetic phonics or control) with a chi-square value 11.25, df of 1 and p of 0.00 ( $>0.05$ ). More pupils in the control group had literate mothers than pupils in the synthetic phonics group.



**Figure 4.8: Father Literacy**

Similarly, 89.13% of the pupils in the government control group had literate fathers while 10.87% did not. The corresponding percentages for the synthetic phonics group are 72.58% and 27.42% respectively. Chi-square value = 1.14, df = 1 and  $p = 0.29 (>0.05)$ . A higher proportion of pupils from the control group had literate fathers compared to the proportion from the synthetic phonics group.



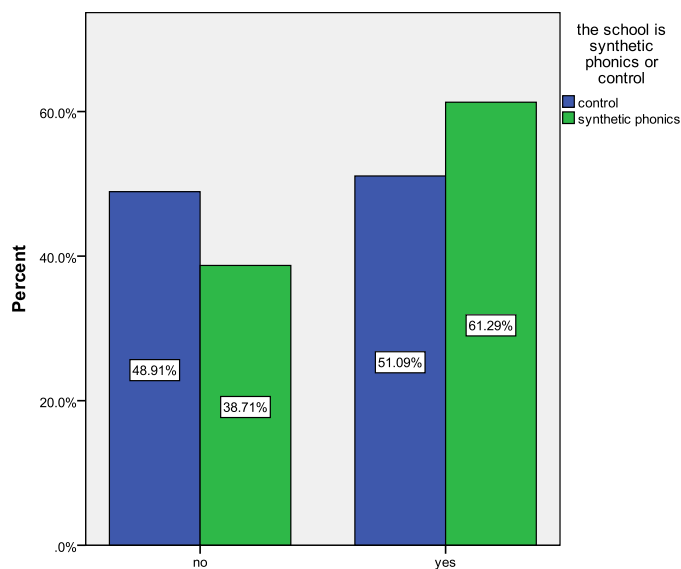
**Figure 4.9: Private lessons**

Figure 9 shows that 45.65% of pupils in the control group attended private lessons after school while 54.35% did not. Corresponding percentages for the synthetic phonics group were 43.55% and 56.45%. However, chi-square analysis indicates that there is no

statistically significant association between attendance at private after school lesson (no or yes) and group type (control or synthetic phonics) with a chi-square value of 0.07, df of 1 and p of 0.80 (>0.05).

### Previous education

The percentage of pupils who had any previous education was similar for the control group 79.35% and the synthetic phonics group 79.03%. In the control group, 20.65% of pupils had no previous education and 20.97% of pupils in the synthetic phonics group had no previous education. Chi-square value = 7.01, df = 1 and p = 0.00 (<0.05).



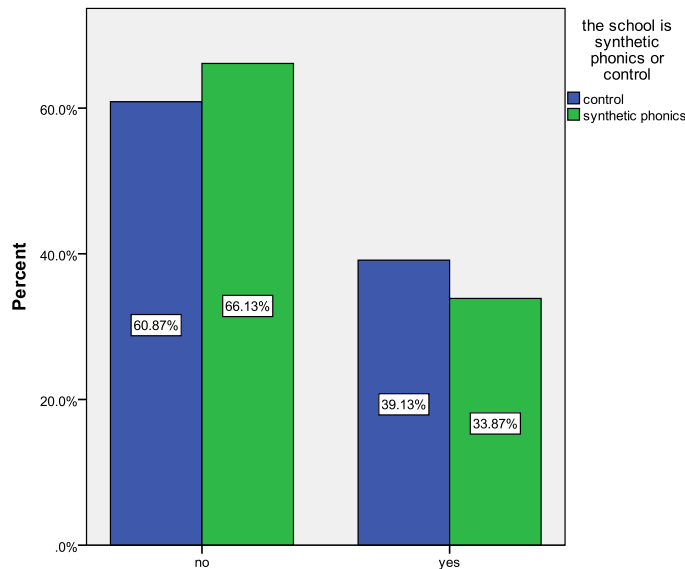
**Figure 4.10: Pupils have reading books at home**

Figure 10 shows that 51.09% of pupils in the control group had reading books other than school textbooks at home and 48.91% did not. The corresponding percentages for the synthetic phonics group were 61.29% and 38.71%. Although a higher percentage of pupils in the synthetic phonics group had reading books at home, the difference was not statistically significant. Chi-square value = 1.56, df = 1 and p = 0.21 (>0.05).

### Someone reads to the pupil at home

The percentage of pupils who were read to by someone at home in the control group (44.57%) was a bit higher than the percentage of those in the synthetic phonics group who had someone read to them at home (43.55%). 55.43% of pupils in the control group

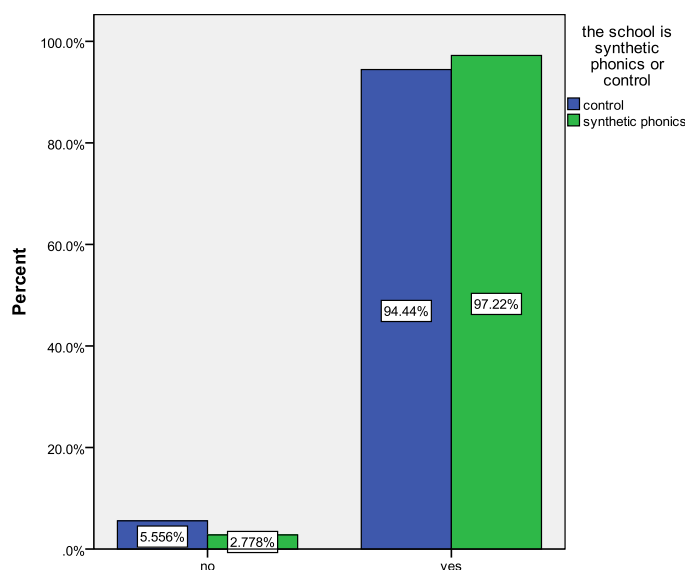
did not have someone who read to them at home and 56.45% of pupils in the synthetic phonics group had no one who read to them at home. Chi-square value = 0.02, df = 1 and p = 0.90 (>0.05). There is no statistically significant association between attendance at private after school lesson (no or yes) and group type (control or synthetic phonics).



**Figure 4.11: Pupil reads aloud to someone at home**

Figure 11 shows that for the control group 39.13% read aloud to someone at home while 60.87% did not. The corresponding percentages for the synthetic phonics group were 33.87% and 66.13% respectively. Although a higher proportion of pupils in the control group read aloud to someone at home, the difference was not statistically significant. Chi-square value = 0.44, df = 1 and p = 0.51 (>0.05).

## Private Schools

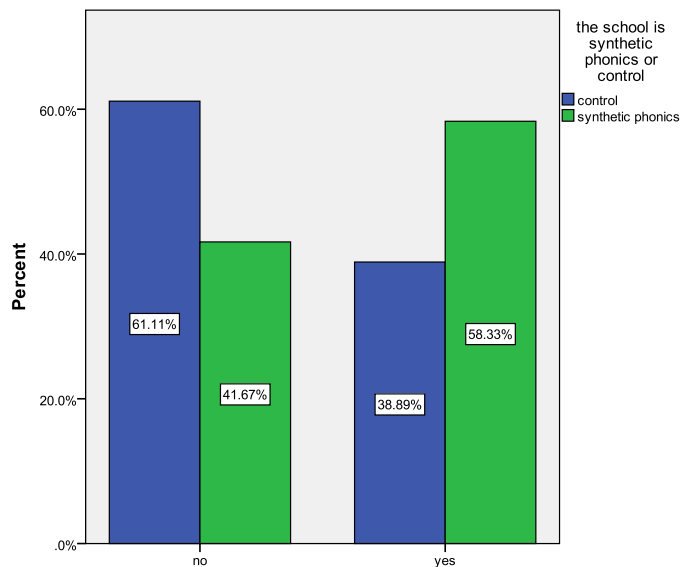


**Figure 4. 12: Mother is literate**

Figure 12 shows that 99.44% of pupils in the control group of the private school sample had literate mothers while 5.56% did not. The equivalent percentages for the synthetic phonics group were 97.22% and 2.78%. Chi-square analysis shows that there is no statistically significant association between mother literacy (no or yes) and group type (synthetic phonics or control) with a chi-square value 0.35, df of 1 and p of 0.56 (>0.05). The proportion of literate mothers in the two groups was similar.

### Father Literacy

Similar to mother literacy, 97.22% of pupils in the control group had literate fathers while 2.78% did not. The equivalent percentages for the synthetic phonics group were 94.44% and 5.56%. Also, chi-square analysis shows that there is no statistically significant association between mother literacy (no or yes) and group type (synthetic phonics or control) with a chi-square value 0.35, df of 1 and p of 0.56 (>0.05). The proportion of literate fathers in the two groups was similar.

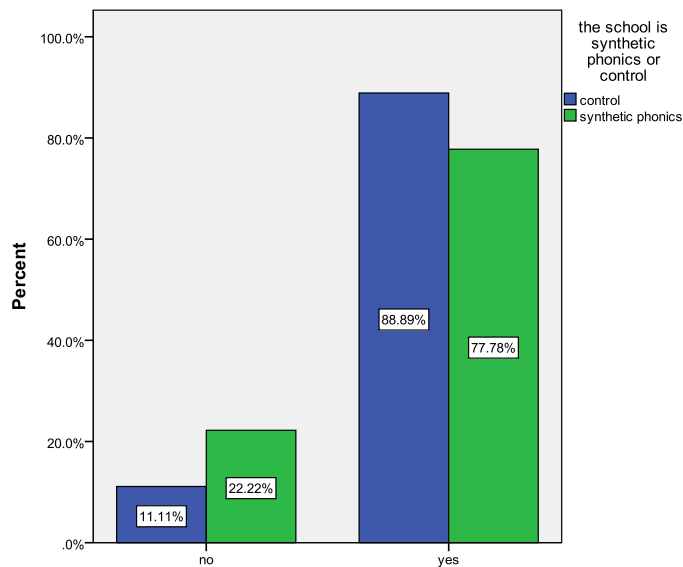


**Figure 4.13: Private lessons**

Figure 13 reveals that 38.89% of pupils in the control group attended private lessons after school while 61.11% did not. Matching percentages for the synthetic phonics group were 58.33% and 41.67%. However, chi-square analysis indicates that there is no statistically significant association between attendance at private after school lesson (no or yes) and group type (control or synthetic phonics) with a chi-square value of 2.72, df of 1 and p of 0.10 (>0.05).

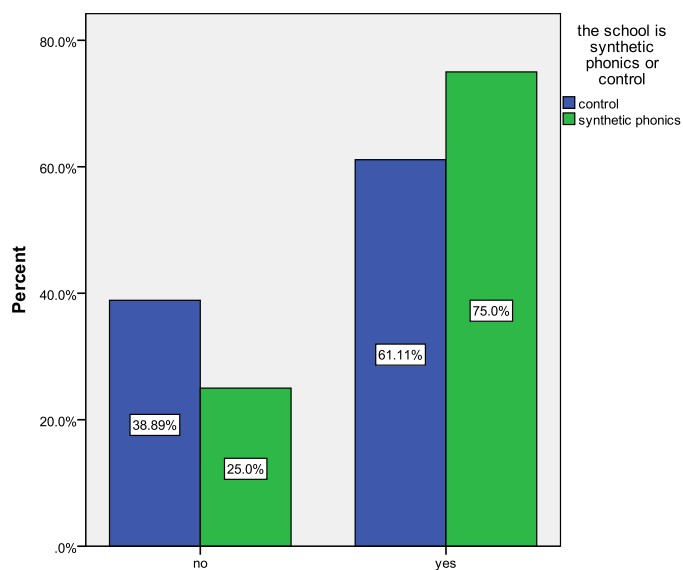
### **Previous education**

The percentage of pupils who had any previous education was the same for the control group 91.67% and the synthetic phonics group 91.67%. In each of the groups, 8.33% of the pupils did not have any previous education. Chi-square value = 0.00, df = 1 and p = 1.00 (>0.05). There is thus no statistically significant association between previous education (no/yes) and group type (control synthetic phonics).



**Figure 4.14: Pupils have reading books at home**

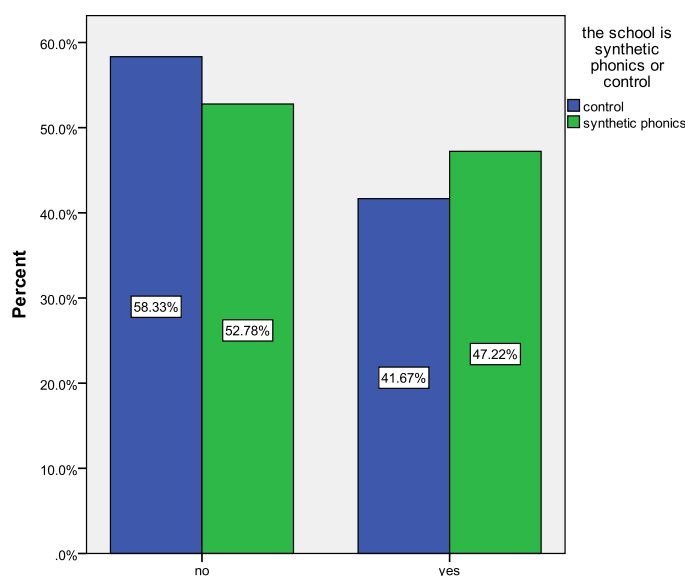
As can be seen in Figure 14, a higher proportion of the pupils in the control group had reading books other than school textbooks at home (88.89%) than the proportion of synthetic phonics group (77.78). 11.11% of the control group pupils did not have reading books at home compared to the 22.22% of the synthetic phonics pupils who did not. Although a higher percentage of pupils in the control group had reading books at home, the difference was not statistically significant. Chi-square value = 1.60, df = 1 and p = 0.21 (>0.05). This shows that there is no association between availability of reading books at home (no/ yes) and group type (control synthetic phonics).



**Figure 4.15: Someone reads to the pupils at home**



The percentage of pupils who were read to by someone at home in the control group was (61.11%) was lower than the percentage of those in the synthetic phonics group who had someone read to them at home (75.0%). 38.89% of pupils in the control group did not have someone who read to them at home and 25.0% of pupils in the synthetic phonics group had no one who read to them at home. However, the difference was not statistically significant: Chi-square value = 1.61, df = 1 and p = 0.21 (>0.05).



**Figure 4.16: Pupil read aloud to someone at home**

Figure 16 shows that for the control group 41.67% read aloud to someone at home while 58.33% did not. The matching percentages for the synthetic phonics group were 47.22% and 52.78% respectively. Chi-square value = 0.21, df = 1 and p = 0.64 (>0.05). This shows that there is no statistically significant association between pupil reads aloud to someone at home (no, yes) and group type (synthetic phonics or control).

In all the factors examined, the family circumstances of the pupils in the synthetic phonics group and those in the control group of the private schools are similar. However, pupils in the control group of the government school sample have significantly higher numbers of literate fathers and mothers than those in the synthetic phonics group.

In further examining if there exists any significant difference in improvement in the reading skills of pupils taught with synthetic phonics and those taught using traditional methods, I carried out some analyses as follows:

#### 4.4.2 Descriptive statistics of pre- test scores (government schools)

Variable	Group	Mean	SD	Min.	Max.
Phoneme awareness	Control	.26	2.12	0	20
	Synthetic Phonics	.40	.93	0	6
Blending	Control	.21	1.59	0	15
	Synthetic Phonics	.03	.25	0	2
Burt reading	Control	61.18	2.58	60	74
	Synthetic Phonics	61.55	2.37	60	69
Schonell Spelling	Control	60.39	1.52	60	72
	Synthetic Phonics	61.65	1.08	60	66

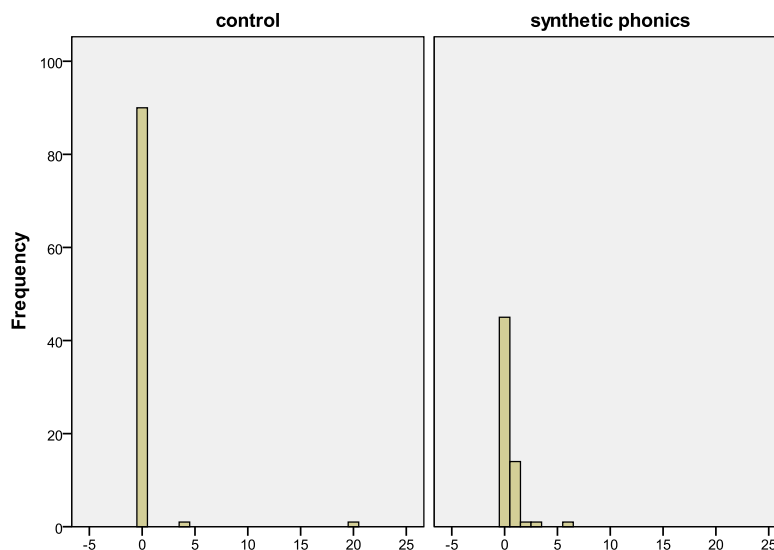
**Table 4.19: Descriptive Statistics of Pupils' Pre-test Reading Skills' Scores by Group (Government)**

The descriptive statistics of the pre-test and post-tests scores of pupils in the government schools in Table 19 illustrates the reading skills' pre-test scores of the pupils in government schools by group (synthetic phonics and control). The results show that in phoneme awareness, the mean pre-test score of the control group was low as compared with those of the pupils in the synthetic phonics group (control  $M=.26$ , synthetic phonics  $M=.40$ ). This shows that pupils in the synthetic phonics group were sounding more letters than the pupils in the control group. However, the standard deviation of the control group was higher ( $SD=2.12$ ) than that of the synthetic phonics group ( $SD=.93$ ). This shows that the scores were more spread out in the control group than in the synthetic phonics group. In blending, the mean score for the control group's pre-test was higher ( $M=.21$ ) than that of the synthetic phonic group ( $M=.03$ ). This implies that the pupils in the control group were able to blend more words at pre-test than pupils in the synthetic phonics group. The mean of pre-test Burt reading age for the control group was lower ( $M=61.18$ ) than that of the synthetic phonics group ( $M=61.55$ ); the pupils in the synthetic phonics group had a mean reading age that was .38 month higher than the pupils in the control group. The mean pre-test score for spelling age for the pupils in the control group was lower ( $M=60.39$ ) when compared with that of their counterparts in the synthetic phonics group ( $M=61.65$ ). Pupils in the synthetic phonics group were 1.26 months ahead in reading age than the control group. In all the tests, the standard deviation of the control group

was higher than the synthetic phonics group showing that the scores were more spread out in the control school. The scores in the synthetic phonics group therefore, were closer to the mean.

To further analyse the data, I will first establish whether or not the distribution of pupils' scores in tests of reading skills (phoneme awareness, blending, Burt reading, and Schonell spelling) in each management group is normal so as to determine the appropriateness of parametric or non-parametric test for the analysis of the data in each of school the management types.

Figure 17 shows the distribution of scores in the synthetic phonics and the control groups of government schools in phoneme awareness.



**Figure 4.17: Distribution of Groups' Phoneme Awareness Pre-test Scores (government schools)**

The results show that the distribution of pupils' performance scores in phoneme awareness was positively skewed. In other words, the pre-test scores in phoneme awareness for a majority of the pupils in the two groups were relatively low. The distribution of the pupils' scores tends to deviate from normality. The distribution of scores for the pupils was spread between 0 and 20 in the control group, and there were outliers in the distribution. In the synthetic phonics group, the scores were between 0 and six but there were no outliers in the distribution. Moreover, in both groups there are gaps in the distribution which contained no value.

Like the distribution of pupils' scores in phoneme awareness, the distribution in blending was positively skewed. This indicates that the pre-test scores in blending for a majority of the pupils in the two groups were low. The distribution of the pupils' scores therefore tends to deviate from normality. The distribution of scores for the pupils was spread between 0 and 15 in the control group and the distribution features the presence of outliers. In the synthetic phonics group, the scores were between 0 and two but there are no outliers. In addition, both groups have gaps which contain no values.

The pre-test performance scores in Burt reading test for pupils in the synthetic phonics and the control groups was also positively skewed. Pupils in each of the groups had low scores showing that the scores for both groups are not normally distributed. The distribution of the scores for Burt reading for the control group when converted to reading age reflects a spread of between 60 and 72 months and is positively skewed. The distribution shows the presence of outliers. In the synthetic phonics group, the distribution of scores for Burt reading test located pupils between 60 and 70 months. There were no outliers in the distribution for the synthetic phonics group though there were bins without data. The control group also had bins without data.

In the same manner, the distribution of pupils' scores in spelling was positively skewed; most pupils had low scores. The distribution also tends to deviate from normality. The distribution of spelling scores show that pre-test spelling age for the pupils was spread between 60 and 72 months in the control group. There were outliers in the distribution of scores in this group. In the synthetic phonics group, the scores for spelling indicate that pupils' spelling score placed them between 60 and 66 months. There are no outliers in the distribution. Both groups had bins without data.

#### ***4.4.3 Private Schools***

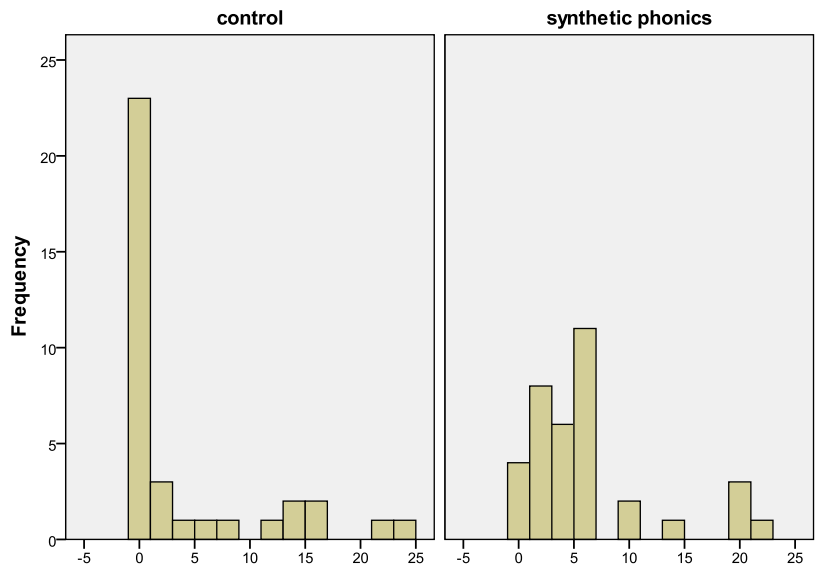
The result from the private schools is presented below:

Variable	Group	Mean	SD	Min.	Max.
Phoneme awareness	Control	3.78	6.79	0	24
	Synthetic Phonics	5.53	5.74	0	21
Blending	Control	1.39	3.61	0	20
	Synthetic Phonics	2.03	3.82	0	16
Burt reading	Control	67.56	6.54	60	94
	Synthetic Phonics	65.28	5.24	60	78
Schonell Spelling	Control	64.31	3.19	60	71
	Synthetic Phonics	63.81	3.92	60	71

**Table 4.20: Descriptive Statistics of Pupils' Pre-test Reading Skills' Scores by Group**

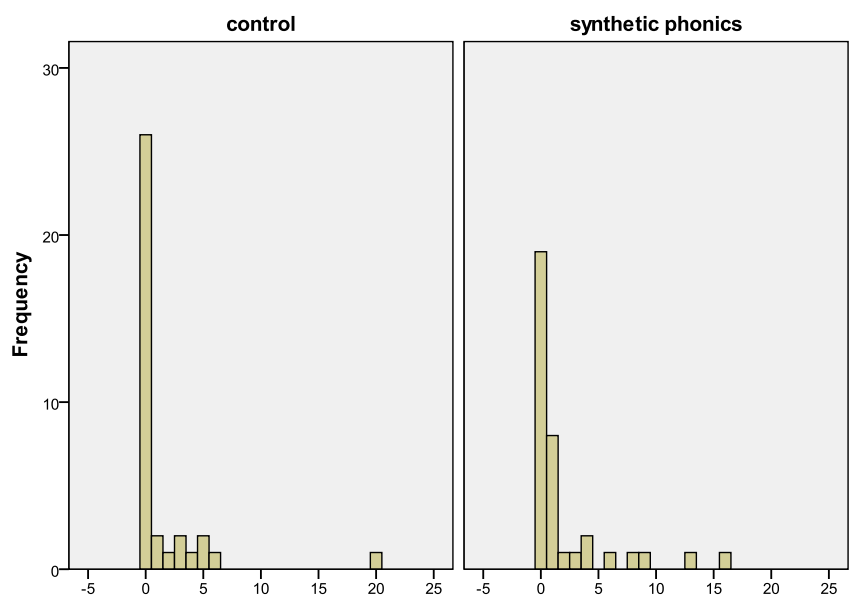
Table 20 illustrates the pre-test results by group in the private schools used in the study. The results show that in phoneme awareness, the mean of the control group's pre-test score is 3.78; SD 6.79 while the synthetic phonics group the mean score was 5.53; SD 5.74. This implies that pupils in the synthetic phonics group were able to sound more letters than those in the control group. However, there was a wider spread of scores in the control group as shown by the standard deviation (Control group SD=6.79; synthetic phonics group SD=5.74). In blending, the mean score for the control group's pre-test was 1.39; SD 3.61, and the synthetic phonics, 2.03; SD 3.82. This indicates that pupils in the synthetic phonics group were able to blend more words than those in the control group. The higher standard deviation also shows that the scores were more spread out than the scores in the control group. The mean of pre-test Burt Reading age for the control group was 67.56, SD 6.54, while for the synthetic phonics group mean pre-test reading age was 65.28; SD 5.24. The inference from this is that pupils in the control group were reading 2.28 months ahead of the pupils in the synthetic phonics group at the time of the pre-test. For Schonell spelling, the mean pre-test spelling age for the control group was 64.31; SD 3.91 and for the synthetic phonics group, mean pre-test spelling age was 63.81; SD 3.92. Pupils in the control group were spelling 0.5 months ahead of the pupils in the synthetic phonics group.

Figure 18 shows the distribution of scores in the synthetic phonics and the control groups of private schools in phoneme awareness.



**Figure 4.18: Distribution of Groups’ Phoneme Awareness Pre-test Scores (Private schools)**

The results in figure 18 show that the distribution of pupils’ performance scores in phoneme awareness was slightly negatively skewed showing that there were relatively few high scorers. The distribution of the pupils’ scores failed the test of normality. The distribution of scores for the pupils was spread between 0 and 25 in the negative direction for the control group. In the synthetic phonics group, the scores were between 0 and 23. There are outliers in the distribution for both groups. Also, in both groups there are gaps in the distribution which contained no value.



**Figure 4.19: Distribution of Groups’ Blending Pre-test Scores**

Figure 19 shows the pre-test performance scores in blending for pupils in the synthetic phonics group and the control group. Unlike the distribution of pupils' scores in phoneme awareness, the distribution in blending was positively skewed. In other words, the pre-test scores in blending for a majority of the pupils in the two groups were relatively low. This distribution of the pupils' scores was not bell shaped and as such not normal. The distribution of scores for the pupils was spread between 0 and 20 and is right tailed for both groups with scores of between 0 and 16 for the synthetic phonics group. The distribution in each group features the presence of outliers. Also, both groups have gaps which contain no values.

The distribution of pupils' performance scores in the Burt reading test was also positively skewed. Both groups recorded low scores showing that the scores for both groups are not normally distributed. The distribution of the scores for Burt reading for the control group when converted to reading age reflects a spread of between 60 and 95 months and shows the presence of outliers. In the synthetic phonics group, the distribution of scores for Burt reading test located pupils between 60 and 79 months. There were no outliers in the distribution for the synthetic phonics group though there were bins without data.

The result for Schonell spelling also showed a distribution that was positively skewed. Few pupils had high scores indicating a distribution which does not comply with normality. The distribution of spelling scores show that spelling age for the pupils was spread between 60 and 71 months and is right tailed for both the control group and the synthetic phonics group. Both groups reflected the presence of outliers in their distribution.

#### ***4.4.4 Distribution of pupils' scores***

There were considerable variations in the pre-test scores by the control and synthetic phonics groups in both school management types. The results in the tables and figures above suggest that the distribution of the scores in all the tests for pupils in the synthetic phonics and control groups in both government and private schools depart from normality. Therefore, to determine the type of test to use in analysing this data further, it was important to confirm if the distribution of the scores in the groups was normal. This is because statistical tests make some assumptions about the shape of the

underlying population in a study. The most common assumption is that the distribution is normal (Salkind, 2008), where normal is a synonym for Gaussian distribution (Sheskin, 2004). This is when the shape of the curve of the distribution is bell shaped. When the distribution is not normal but negatively skewed, the left tail is longer and the mass of the distribution tilts to the right of the figure. This shows that a relatively large number of the scores occur at the higher values (Pagano, 2011) i.e., there are many high scorers. Conversely, if the distribution is positively skewed, the right tail is longer and the mass of the distribution is concentrated on the left of the figure showing relatively few high values (Rowntree, 1981; Swift and Piff, 2010). In other words, many more people had low scores than high scores. When there is no obvious skew, the distribution is said to have zero skewness which is the normal distribution (Swift and Piff, 2010). Parametric testing assumes normal distribution (Moore, 2010).

The figures displayed by the histogram suggest that the pre-test scores of the two groups are not normally distributed. Therefore, in order to further determine whether the scores of respective control and synthetic phonics groups were normally distributed and ascertain if the use of parametric tests was applicable for the analysis of the data meant to compare the synthetic phonics group and the control group's reading ability (phoneme awareness, blending, Burt reading, and Schonell spelling), the Shapiro-Wilk Test of normality and Levene's test of homogeneity of variances were performed (Sheskin, 2004) for both the government and private schools' data.

Variable	N	Group	W	p
Phoneme awareness	92	Control	.10	.00
	62	Synthetic Phonics	.47	.00
Blending	92	Control	.11	.00
	62	Synthetic Phonics	.11	.00
Burt reading	92	Control	.53	.00
	62	Synthetic Phonics	.70	.00
Schonell Spelling	92	Control	.28	.00
	62	Synthetic Phonics	.34	.00

**Table 4.21: Shapiro-Wilk Test of Normality on schools' Pre-test Scores (government schools)**



Variable	N	Group	W	p
Phoneme awareness	36	Control	.63	.00
	36	Synthetic Phonics	.75	.00
Blending	36	Control	.44	.00
	36	Synthetic Phonics	.60	.00
Burt reading	36	Control	.84	.00
	36	Synthetic Phonics	.88	.00
Schonell Spelling	36	Control	.93	.02
	36	Synthetic Phonics	.84	.00

**Table 4.22: Shapiro-Wilk Test of Normality on Groups' Pre-test Scores (Private schools)**

Tables 21 and 22 show the results of the Shapiro-Wilk's test conducted to measure pupils' performance in phoneme awareness, blending, Burt reading, and Schonell spelling tests. In the assessment of pupil's pre-test scores in phoneme awareness, the government control group had ( $W = .10$ ;  $p = .00$ ) and the government synthetic phonics group had ( $W = .47$ ,  $p < .05$ ); private control ( $W = .63$ ,  $p = .00$ ) private phonics, ( $W = .75$ ,  $p = .00$ ). Moreover, in blending, the government control group recorded ( $W = .11$ ,  $p = .00$ ), and the government synthetic phonics group also recorded ( $W = .11$ ,  $p = .00$ ). The private control group had ( $W = .44$ ,  $p = .00$ ) private synthetic phonics ( $W = .60$ ,  $p = .00$ ). The results further indicated that in Burt reading test, the government control group had ( $W = .53$ ,  $p < .05$ ), while the synthetic phonics group had ( $W = .70$ ,  $p < .05$ ); the private control group had ( $W = .84$ ,  $p = .00$ ); private synthetic phonics had ( $W = .88$ ,  $p = .00$ ) and in spelling test, the government control group had ( $W = .28$ ,  $p = .00$ ) and the government synthetic phonics group recorded ( $W = .34$ ,  $p = .00$ ) while the private control had ( $W = .93$ ,  $p = .02$ ) and private synthetic phonics had ( $W = .84$ ,  $p = .00$ ). The results thus suggest that the distribution of the scores in all the tests for pupils in the synthetic phonics and control groups in both government and private schools samples depart from normality. This confirmed the conclusions drawn from the distributions plots reported earlier.

In view of the above, the researcher decided to verify whether the variances of the samples' baseline scores were the same or not so as to avoid the error of making faulty inferences. Thus the groups' variances in the pre-test scores were subjected to

Levenes’s test of homogeneity of variances. The result of the analysis is presented in Tables 23 and 24

Variable	N	Levene Statistic	df1	df2	p
Phoneme awareness	154	.08	1	152	.78
Blending	154	2.89	1	152	.09
Burt reading	154	.21	1	152	.65
Schonell Spelling	154	.30	1	152	.58

**Table 4.23: Levene’s Test of Homogeneity of Variances (government school)**

Table 23 reveals the results of the Levene’s test conducted to assess the homogeneity of variances in the government samples control and synthetic phonics groups’ scores in phoneme awareness, blending, Burt reading and Schonell spelling in the government schools. The results revealed that the variances of the pupils’ pre-test scores across the groups were not significantly different in phoneme awareness (.78,  $p > .05$ ), blending .09,  $p > .05$ ), Burt reading (.65,  $p > .05$ ) and spelling (.58,  $p > .05$ ). The outcome of this test shows that with respect to the groups’ pre-test scores in phoneme awareness, blending, Burt reading test and spelling test, the assumption of homogeneity of variances was not violated.

Variable	N	Levene Statistic	df1	df2	p
Phoneme awareness	72	1.394	1	70	.87
Blending	72	.663	1	70	.42
Burt reading	72	.038	1	70	.85
Schonell Spelling	72	1.379	1	70	.24

**Table 4.24: Levene’s Test of Homogeneity of Variances (private schools)**

Table 24 presents the results of the Levene’s test conducted to assess the homogeneity of variances in private control and synthetic phonics groups’ scores in phoneme awareness, blending, Burt reading and Schonell spelling for the private school samples. The results revealed that the variances of the pupils’ pre-test scores across the groups were not significantly different in phoneme awareness (1.39,  $p=.87$ ), blending ( $p = .42$ ), Burt reading ( $p = .85$ ) and spelling ( $p = .24$ ). The outcome of this test for the private schools samples also shows that the assumption of homogeneity of variances was not violated concerning the groups’ pre-test scores in phoneme awareness, blending, Burt reading test and spelling test. Levene’s test shows that the variances of the groups’ scores were not significantly different in any of the tests.

Although the Levene's tests show that the variances of the groups' scores were not significantly different, the histogram revealed that the distribution of the groups' scores in the various tests departed from normality. Also, the Shapiro Wilk test of normality shows that the pre-test scores of the groups in all the four dimensions of reading skills measured were significantly different from the normal distribution. In view of the outcomes of the analysis in Tables 23 and 24, the application of the parametric tests in the analysis of the data for this study was not appropriate; hence the need for the non-parametric tests (Mann-Whitney U test and Wilcoxon Sign Ranked tests) for the analysis of the data. In using these tests, data gathered from two different samples (Skay, 2007), are changed from scores to ranks (Siegel and Castellan, 1988).

Thus, the mean rank scores of pupils in the synthetic phonics and the control groups for each of the school management types were compared at 0.05 level of significance for the different aspects of the reading skills measured in the study. The analysis below show first the descriptive statistics comparing mean ranks of the pre- and post-test scores of each group followed by the Wilcoxon Signed rank tests. The Wilcoxon Signed rank test is used to verify if there are differences between paired observations, in this case, the difference between the pre-and post-test. The test also shows the direction of the differences. It is the non-parametric equivalent of the paired sample t-test earlier used in this chapter. The Wilcoxon Signed rank test here investigates the within group differences between the pre and post-test. This is followed by a comparison of post-test scores between the synthetic phonics and the control groups using the Mann Whitney U test.

#### 4.5 Descriptive Statistics of Groups' Reading Skills' Pre- and Post-test Scores (Government schools)

Variable	Test	Group	Mean Rank	Min.	Max.	Group	Mean Rank	Min	Max
Phoneme awareness	Pre	Control	69.85	0	20	Phonics	88.85	0	6
	Post		49.01	0	26		119.77	0	30
Blending	Pre	Control	78.02	0	15	Phonics	76.73	0	2
	Post		71.96	0	20		85.72	0	14
Burt reading	Pre	Control	73.80	60	74	Phonics	82.98	60	69
	Post		79.19	60	78		74.99	60	81
Schonell Spelling	Pre	Control	77.98	60	72	Phonics	76.79	60	66
	Post		78.54	72	64		75.96	60	67

**Table 4.25: Descriptive Statistics of the Government School's Reading Skills' Pre-test and Post-test Scores**

The results in Table 25 show the pre-test and the post-test descriptive statistics of the control and synthetic phonics groups in the government schools in the four tests used in the study. For the control group, the mean rank of the pre-test scores of the pupils in phoneme awareness was 69.85 and that of their post-test scores were 49.01. In blending, the mean rank of the pre-test scores of the group was 78.02, while the group's post-test mean rank score was 71.96. The group's pre-test mean rank score in Burt reading was 73.80 and the post-test scores mean rank was 79.19. In spelling, the group's mean rank pre-test score was 77.98, while the post-test scores mean rank was 78.54. The mean rank of the post-test scores was lower when compared with the mean rank of the pre-test scores in phoneme awareness and in blending but reversed in Burt reading age and Schonell spelling age where the pupils had higher mean rank scores at the post-test.

For the synthetic phonics group, in phoneme awareness, the mean rank pre-test scores of the pupils were 88.85 and their post-test mean rank scores were 119.77. In blending, the mean rank pre-test scores of the group were 76.73, while the group's mean rank post-test scores were 85.72. In both tests, the mean rank reflects improvement between the pre-test and post-test. The mean rank of the group's pre-test reading age in Burt reading was 82.98 and of the post-test scores were 74.99. In spelling, the group's mean rank pre-test reading age was 76.79, while the group's mean rank post-test reading age was 75.96. While there was obvious increase in the post test mean rank scores in phoneme awareness and blending in the synthetic phonics group, there was

reduction in the mean rank scores in Burt reading and Schonell spelling at the post test. The teachers in the synthetic phonics group needed to get used to the new method especially blending and sounding so also did the pupils who already had training in rote learning. This obviously caused some set back in learning. While learning the sounds progressed smoothly from the start, blending and sounding required a while for teachers and pupils to get accustomed to. However, teachers in the control schools continued teaching pupils how to learn words by rote. This could have resulted in the rapid gain in word recognition by the control group.

Variable	Test	Group	Mean Rank	Min.	Max.	Group	Mean Rank	Min	Max
Phoneme awareness	Pre	Control	28.76	0	31	Phonics	42.44	0	21
	Post		24.46	0	20		48.54	0	41
Blending	Pre	Control	32.42	0	20	Phonics	39.58	0	16
	Post		28.75	0	20		44.25	0	20
Burt reading	Pre	Control	40.24	60	94	Phonics	32.76	60	78
	Post		36.71	60	101		36.29	60	106
Schonell Spelling	Pre	Control	38.97	60	71	Phonics	34.03	60	71
	Post		41.01	60	79		31.99	60	72

**Table 4.26: Descriptive Statistics of the Control Group’s Reading Skills’ Pre-test and Post-test Scores (private schools)**

Table 26 shows the pre-test and the post-test descriptive statistics of the private schools in the four tests. In the control group, the mean rank of the pre-test scores in phoneme awareness was 28.76 and that of their post-test scores were 24.46. This shows a deterioration in knowledge of sounds between the time of the pre-test and the post-test. In blending, the mean rank of the pre-test scores of the group was 32.42, while the group’s post-test mean rank score was 28.75. This also implied that pupils in the control group had lower mean rank scores at the post-test than at the pre-test. The group’s pre-test mean rank score in Burt reading was 40.24 and the post-test scores mean rank was 36.71, a reduction of 3.53 from the pre-test mean rank. In Schonell spelling, the group’s mean rank score was 38.97, while the post-test scores mean rank was 41.01. This was the only test where there was improvement between the pre-test and the post-test in the control group.

The results in Table 26 also illustrates the pre-test and the post-test descriptive statistics of the synthetic phonics group in the four tests. In phoneme awareness, the mean rank of the pre-test scores of the pupils was 42.24 and their post-test mean rank scores were

48.54. In blending, the mean rank pre-test scores of the group was 39.58, while the group's mean rank post-test scores were 44.25. The mean rank of the group's pre-test scores in Burt reading was 32.76 and of the post-test scores were 36.29. In spelling, the group's mean rank pre-test scores were 34.03, while the group's mean rank post-test scores were 31.99.

In both school management types, the synthetic phonics taught pupils show improvement in phoneme awareness and blending skills far and above the pupils in the control groups whose average scores showed no improvement.

#### **4.6 Was there significant improvement between pre-test and post-test?**

Furthermore, I compared the mean rank scores of both tests within the groups to show the impact of the different teaching methods used on the improvement made by the pupils. This was carried out using the Wilcoxon Signed-rank test. The results are in Tables 27 – 34. Each group's pre and post-test scores were analysed separately. However, the results are presented side by side in order to compress the presentation and reduce the number of tables. The tables do not show comparison, instead, they show the separate results of each group. In addition to the statistical analysis, data from classroom observation and teacher focus group discussions were explored to further elucidate the change in scores in the synthetic phonics groups.

##### **4.6.1 Phoneme awareness**

	Group	N	p		Group	N	p
	Control				Phonics		
Negative Ranks		0				0	
Positive Ranks		8	0.01			58	0.00
Ties		84				4	
Total		92				62	

**Table 4.27: Wilcoxon Signed-rank test for Phoneme awareness (Government school)**

In Table 27, the result shows that while no pupil in the control group had a lower score in post phoneme awareness test than they did in the pre-test; only eight pupils had higher post test scores than their pre-test scores, while 84 pupils had no change in score ( $p=0.01$ ), depicting a statistically significant difference between pre and post test scores.

In the synthetic phonics group, zero pupils had a lower score in post phonemic awareness test than they did in the pre-test; 58 pupils had higher post test scores than their pre-test scores, while four pupils had no change in their scores. ( $p=0.00$ ) showing a statistically significant difference between pre and post test scores.

	Group	N	p	Group	N	p
	Control			Phonics		
Negative Ranks		1			0	
Positive Ranks		27	0.00		34	0.00
Ties		8			2	
Total		36			36	

**Table 4.28: Wilcoxon Signed-rank test for Phoneme awareness (Private schools)**

In Table 28, the result shows that 27 pupils in the control group had higher post- test scores than their pre-test scores. Eight pupils had no improvement in scores and 1 pupil had a lower post- test than pre-test score. ( $p=0.00$ ) indicating a statistically significant difference between pre and post test scores.

In the synthetic phonics group, no pupil had lower score in post phoneme awareness test than they did in the pre-test; 34 pupils had higher post-test than pre-test scores. 2 pupils had no change in scores ( $p=0.00$ ) implying a statistically significant difference between pre and post-test scores.

In both school management types, the pupils in the synthetic phonics groups show evidence of improvement more than the pupils in the control groups.

Qualitative data from the focus group discussion and classroom observation throws some light on why this may have been so. Prior to the training in the use of synthetic phonics method, all teachers were not likely to know the sounds and as such would be unable to teach the pupils the sounds. While the synthetic phonics group's teachers were taught the sounds, the teachers in the control group were not taught the sounds, it is therefore not surprising that pupils in the control groups did not make as much improvement in phoneme awareness. At the pre-intervention focus group, the teachers in the synthetic phonics group confirmed that teachers do not have any training in sounds. They were certain that the synthetic phonics method would be useful in

teaching the pupils the sounds. Teachers' opinions about the usefulness of synthetic phonics in improving pupils' learning performance extended to enhanced improved pronunciation, recognition of sounds, and retention. The teachers unequivocally indicated the hope that the use of synthetic phonics would provide the pupils ample opportunities to improve their ability in pronouncing sounds and words correctly.

**FG Extract 1:**

1 Participant 3: and to add to what she has said, the sounds  
2 were not properly (.) taught in primary school. Before now,  
3 some of us didn't know the names of these sounds and how to  
4 sound the words, but now we can easily teach it to the  
5 children like 'ai' you will be able to know how to put the  
6 sound or how it sounds or 'e' you say 'e' and also that is  
7 the proper use of the words that will make children to know  
8 how to read these words and pronouncing them and knowing  
9 them well. Because before, children could not pronounce these  
10 words and they didn't know how to form these letters and the  
11 proper use of the sounds but now with the teaching of these  
12 sounds children will easily pronounce the words well.



Participant 3 in the extract above stated that teachers did not know the sounds previously but having learnt the sounds now, they would be able to teach the pupils and pupils in turn would be able to pronounce the sounds and use them to read and write words. Although teachers are known to learn from others and some schools, especially private schools carry out some training for their teachers, teachers in the control group would not be expected to know the sounds as well as the teachers who had been trained in the synthetic phonics method.

In the synthetic phonics schools, the comments of the teachers during the focus group discussions are confirmed by evidence from classroom observation. Teachers showed knowledge of the subject in teaching the sounds to the children. They used the actions mnemonics to advantage as can be seen in the classroom observation (CO) extracts below:

CO Extract 1 is characteristic of the teaching of sounds by the teachers. The teacher introduces the sound by saying the sound and asking the pupils to repeat the sound.

#### **CO Extract 1**

##### **(S4P)**

- 1 Teacher: Our sound today says 'w'. Says what?
- 2 Pupils: 'w'
- 3 Teacher: Again?
- 4 Pupils: 'w'
- 5 Teacher: 'w' 'w' 'w'
- 6 Pupils: 'w' 'w' 'w'
- 7 Teacher: There's something in your hands and you want to
- 8 blow it off #4.20 'w' 'w' 'w' 'w'. Blow it off. (Teacher
- 9 demonstrates the action of blowing air on the palms while
- 10 saying the sound 'w')
- 11 Pupils: 'w' 'w' 'w' 'w' (doing the action)
- 12 Teacher: Very good



**Figure 4.20 Teacher introducing the sound 'w'**

The teacher follows on by telling a short story, or making a statement which she judges to be memorable accompanied by the mnemonic action for the sound. The teachers make the pupils pronounce the sound again and again to confirm that the pupils get the correct pronunciation of the sound.

**CO Extract 2**

**(S3P)**

Teacher: Now we are going to take the sound 'ng' (does the action and writes the sound on the board). All say #4.21 'ng'



**Figure 4.21: Teacher doing action for 'ng'**

Pupils: 'ng' (doing the action)

In addition to facilitating the learning of the sounds, teachers expressed the hope that the actions and games which accompany the synthetic phonics programme would result in a student-centred, participatory, and engaging learning classroom. During the pre-intervention discussion, teachers said that with the games, songs and actions, the pupils would engage in the learning and the learning will be easy.

### **FG Extract 2**

1 Participant 4: Another thing there is that with the sounds  
2 and the action, action also helps a lot because once the  
3 teacher is out there teaching sounds to the pupils after  
4 mentioning the sound, he now comes up with the action and  
5 the child as soon as the teacher comes into the class and  
6 says what sound is this by mere coming out with the sound  
7 and the action, has made learning interesting for the  
8 children, because as you come with the stories (.) and the  
9 demonstrations (.) they pick interest and learn.

10 Participant 1: even with the stories as well (.), even as  
11 she has said, (.) when they remember the stories they can  
12 easily identify the, the sounds, (.) and also pronounce words  
13 easily (.) without much stress

14 Participant 2: the teacher gains a lot, most of our teachers  
15 before now did know the sounds of this many letters but now  
16 know the sound and can pronounce them and the play way  
17 methods, the teacher is playing with the pupils, she also  
18 gaining a lot, even without using the text books whatsoever  
19 he can teach because he's using the play way method in  
20 teaching and the children too also gain because they are  
21 playing with the sound

The teachers indicated during the second focus group discussion that when compared with teaching with the traditional method, the synthetic phonics classroom was highly engaging.

### FG Extract 3:

1 It has made learning interesting for the children, because  
2 as you come with the stories (.) and the demonstrations ()  
3 they pick interest and learn.

4 Participant 3: even with the stories as well (.), even as  
5 she has said, (.) when they remember the stories they can  
6 easily identify the, the sounds, (.) and also pronounce words  
7 easily (.) without much stress

Teachers also said the actions were useful not only when teaching in the class but also for recall when pupils may have temporarily forgotten a sound. This was observed as a pupil attempted to remember the sound 'm' while attempting to blend the word 'swim' several lessons after the class learnt 'm'

### CO Extract 3

#### (S3P)

- 1 Teacher: I'm hearing 'n'. #4.22 Pointing at 'm', is this 'n'?
- 2 Pupils: 'm' #4.23 rubbing the tummy, showing action for 'm'

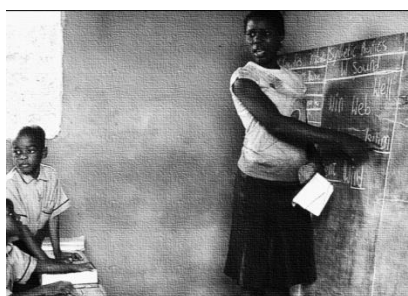


Figure 4.22: Teacher points at 'm'

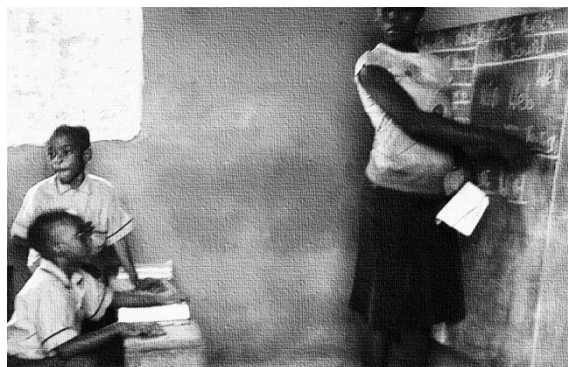


Figure 4.23: Pupil does 'm' action

Another aspect of the teaching which facilitated phoneme awareness training was the writing lessons. Teachers taught the pupils how to write the sounds in many different ways and they made the sounds several times during the writing process as in the

classroom scenes depicted below. Writing and saying the sounds in different ways enhanced the pupils' achievement in phoneme awareness.

#### **CO Extract 4**

**(S1G)**

- 1 Teacher: What sound is this? Writing 'g' on the blackboard.
- 2 Pupils: g
- 3 Teacher: Correct, everyone say 'g'
- 4 All pupils: g, g, g
- 5 Teacher: okay, that is the ...
- 6 Pupils: ...sound
- 7 Teacher: so, to write this sound, you write #4.24 caterpillar
- 8 'c' (she writes)



**Figure 4.24: Teacher writes caterpillar 'c'**

Teacher: Do you see it?

Pupils: Yes

Teacher: Then you make a line, come down, across the line,  
and...

Pupils: ... stop

Teacher: (completed writing) Do you see it?

Pupils: Yes

Teacher: You always bring this sound across the line. (she draws a line #4.25 to symbolise the vertical lines in pupils' notebooks.



**Figure 4.25: Teacher completes writing 'g'**

However, when teachers taught diagraphs (where two letters make one sound), they did not need to teach how to write the sounds all over again as they had taught the individual sounds earlier. Teachers expected the pupils to know how to write the diagraphs and the pupils often did. An example is in the classroom observation extract below.

#### **CO Extract 6**

**(S1G)**

- 1 Teacher: Now we're going to take this sound, #4.26 'ng'.
- 2 Teacher: Who can write 'ng'
- 3 Pupils: #4.27(jumping up) Me, me, me. Aunty, Aunty,
- 4 aunty (raising their hands)
- 5 Teacher: (walks through the class looking at all the pupils
- 6 and hands the chalk to the last pupil to raise her hand. ...
- 7 (name of pupil) go and write 'ng' for us.
- 8 Pupil: #4.28 writes 'ng'
- 9 Teacher: Is she correct?

- 10 Pupils: Yes
- 11 Teacher: Give her *atama*
- 12 Pupils: #4.29 Clap



**Figure 4.26: Teacher writes 'ng'**



**Figure 4.27: Pupil jumps up**



**Figure 4.28: Pupil writes 'ng'**



**Figure 4.29: All Clap**

Next, the teacher tells the pupils to write the sound on their desks, they did. Also, the teacher tells them to write the sound on the back of friends. Pupils and teachers wrote sounds on their friends' backs as shown in the extract below and they had great fun as they wrote

- 1 Teacher: Now I want you to write 'ng' on your friend's back.
- 2 (In a playful voice) Let's write it on our friend's back
- 3 Pupil: Write it on R's (name of friend) back
- 4 #4.30 Pupils and teacher write 'ng' on someone's back.
- 5 Teacher: That's very good. Let's clap for ourselves
- 6 All: Clap



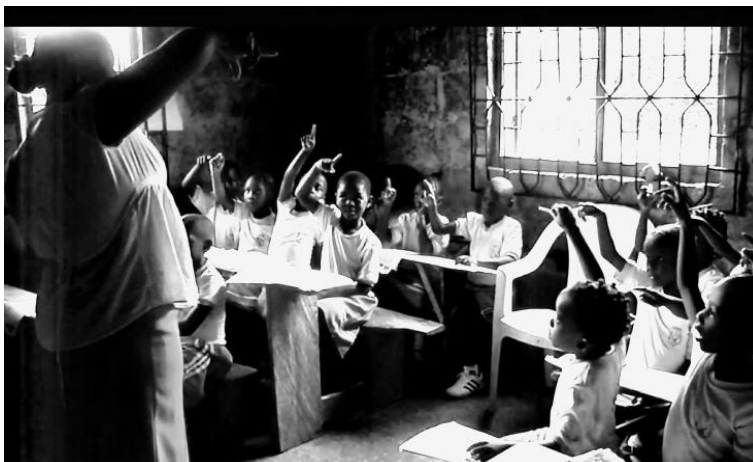
**Figure 4.30: Writing on friend's backs**

They also wrote in the air:

**CO Extract 7**

**(S3P)**

- 1 Teacher: Let's write 'ng' in the air. Teacher leads
- 2 Pupils: #4.31 Copy teacher by writing in the air
- 3 Teacher: What did we write?
- 4 Pupils: 'ng'



**Figure 4. 31: Writing in the air**



As seen above, writing in the notebooks or workbooks was accompanied by step-by-step guidance by the teacher. This facilitated not only the learning of the sound but also good handwriting skills.

As observed in the Wilcoxon sign rank test in Tables 27 and 28, there were significant improvements in the control groups as well as in the synthetic phonics groups in both school management types. The post-test scores of both groups in phoneme awareness were further compared using Mann-Whitney U test (Salkind, 2008) to check if there is any significant difference in the improvement of the control and synthetic phonics groups in the two school management types. The results are displayed on Table 29 and 30 in the order of first government schools and then private schools.

Variable	Group	Mean Rank	Sum of Ranks	U	Z	p
Phoneme awareness	Control Group	49.01	4509.00	231	-10.63	0.00
	Synthetic Phonics	119.77	7426.00			

**Table 4.29: Mann-Whitney U test for Synthetic and Control Groups' Post-test Performance Scores in Phoneme awareness (government schools)**

Table 29 presents the results of the test conducted to investigate whether pupils taught using synthetic phonics would score, on average, higher than the pupils taught with the traditional letter name method in phoneme awareness. The outcome of the test revealed that the mean rank of the control group was 49.01, while that of the pupils in the synthetic phonics group was 119.77. Mann-Whitney U test indicates that mean ranks of the two groups in phoneme awareness were significantly different ( $U = 231$ ,  $Z = -10.63$ ,  $p = 0.00$ ). This implies that pupils taught with synthetic phonics scored significantly higher in phoneme awareness than their counterparts who were taught using the traditional method.

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p
Phoneme awareness	Control Group	36	24.46	880.50	214.50	-4.89	0.00
	Synthetic Phonics	36	48.54	1747.50			

**Table 4.30: Mann-Whitney U test for Synthetic and Control Groups' Post-test Performance Scores in Phoneme awareness (private schools)**

Table 30 shows the results of the post-test phoneme awareness in private schools. The mean rank of the control group was 24.46, while that of the pupils in the synthetic phonics group was 48.54. The results of the Mann Whitney U test indicates that mean ranks of the two groups in phoneme awareness were significantly different ( $U = 214.50$ ,  $Z = -4.89$ ,  $p = 0.00$ ) indicating that pupils taught with synthetic phonics scored significantly higher in phoneme awareness than the pupils in the control group. In the two school management types, teaching with synthetic phonics produced greater phoneme awareness than teaching with the traditional method.

The above result can only be expected considering the amount of efforts teacher invested in teaching the sounds to the pupils and the accompanying response from the pupils as seen in the various classroom observation extracts. The result implies that the hope expressed by Participant 3 above was realised. The teachers also confirmed at the post intervention focus group discussion that pupils made great improvement in their knowledge of the sounds.

The extract below from the post intervention focus group discussion reveals that the teachers stated that when they used the traditional method, pupils were unable to read words, nor write words that were dictated to them but that with the synthetic phonics teaching method, the pupils are able to pronounce words and to recognise and form words because they have learnt the basics of word formation - sounds.

**FG Extract 4:**

- 1 Participant 2: that's what I said the last time, like what
- 2 I said the last time, the performance of children now in
- 3 language through this phonics has been very much better, far
- 4 much better than before

5 Participant 1: For me, I will say I think we have it good,  
6 good and very good, I think we have not really gone too far  
7 the number of sounds of the book we cover will now determine  
8 how far we can pronounce, that is the amount of words that  
9 we can pronounce, so for now, the ones we've treated, it's  
10 been good, (.) and I know as we go on, we'll do better.

11 Participant 4: Learning actually ?solidifies **the foundation**  
12 **of the child**, (.) because once they can be able to come up  
13 with this sounds, and they pronounce words very, it helps  
14 them, it actually increases their performance, just like  
15 my sister has just said, it increases their level ( ) of  
16 performance.

17 Participant 3: the pupils are trying, (.) even before now  
18 they could not do dictation, but now if you dictate to them,  
19 with the sounds, they will be able to write it by themselves.  
20 (.) So they are trying.

Moreover, the teachers explained that the use of synthetic phonics in teaching and learning of English helped in fostering pupils' increased retention of what they were taught during the instructional process. To the teachers, pupils' involvement in repeated production of sounds enhanced their ability to reproduce the sounds during class and to remember the sounds afterwards. This was mirrored in the opinion of two of the teachers:

#### **FG Extract 5:**

1 Participant 2: this synthetic phonics method has helped  
2 pupils a lot (.) (un)like  
3 the former method they were using they were sometimes not  
4 able to write and trace letters properly but now by  
5 synthetic method we are now able to get pupils well  
6 acquainted with letters, ( ) sounds, ( ) they can now sing  
7 along with some of the sounds each time, and they never  
8 forget, mostly when they get, when they start seeing the  
9 sounds on the flash cards, they are always willing and

10 excited, they keep singing over and over Participant 4:  
11 Another thing is the revision of the sounds each day helps  
12 the children a lot, because by the time you go back to the  
13 previous sounds you have already learnt, it makes the  
14 children to flow along

#### **4.6.2 Blending**

Although the teachers were excited and saw all the good reasons why the implementation of the new method should be effective, pre-intervention teacher focus group discussion revealed that teachers had foreseen that blending may be difficult for the pupils as one of them expressed concern during the discussion that pupils may have difficulty with blending. She wondered if the pupils would be able to blend.

##### **FG Extract 6:**

Participant 5: The thing is that our children may not be able to blend.

This may have been because the teachers also had some difficulty learning how to blend during the training. However, this situation is not peculiar to the teachers and pupils in this study. Blending is a skill that learners find challenging at the start but when they become accustomed to blending, the initial difficulties disappear. During the pilot study, the pupils learnt the sounds quickly but were challenged when it came to blending. The initial challenge was so great so that I emailed my supervisor from the field to ask for advice. The advice she gave was that they should keep blending. Also, at a conference on synthetic phonics, many teachers expressed similar concern at pupils' initial inability to blend. The same advice was given (Lloyd, 2010) as my supervisor gave me- the only way for pupil to learn to blend is to keep blending.

Post intervention focus group revealed that the fear that there may be challenges with blending was not unfounded. All the teachers had different levels (from mild to moderate) of challenge with getting the pupils to blend.

##### **FG Extract 7:**

1 Participant 1: I personally I had problem of blending, (.)  
2 the children could not really (.) find it easy blending.

3 (.) Though with time I know they are improving, but we  
4 still have that problem a little

Classroom observation revealed that the teachers invested great efforts in teaching the pupils how to blend.

In the first few weeks, getting the pupils to blend was a formidable task for the teachers. The difficulty the teacher faced in teaching student to blend is captured in CO Extract 8 below.

The teacher asks the pupils to identify the sounds, and for each of the 3 words, the pupils readily identify the sounds but blending is very difficult.

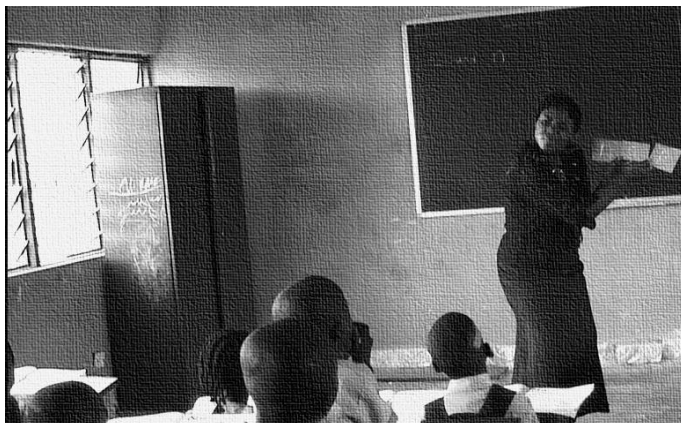
### **CO Extract 8**

#### **(S2G)**

- 1 Teacher: What is this sound?
- 2 Pupils: 'a'
- 3 Teacher: ehn? Ehn?
- 4 Pupils: 'p'
- 5 Teacher: What is this sound?
- 6 Pupils: 'i'
- 7 Teacher: What is this sound?
- 8 Pupils: 'n'
- 9 Teacher: Now they want to become friends, they are now  
10 friends. (sings - I have seen my friends, I have seen my  
11 friends)
- 12 Now look at this word now, can you say this word out?
- 13 Pupils: Yes
- 14 Teacher: Okay, (oya) pronounce this word for me
- 15 Pupils: 'nep'

16 Teacher: #4.32 Looking puzzled

Pupils make several other wrong attempts



**Figure 4.32: Teacher looking puzzle**

When the first attempt failed, the teacher tries another combination of sounds 'n', 'a', 'p'.

**CO Extract 9**

**(S2G)**

- 1 Teacher: What sound is this?
- 2 Pupils: 'n'
- 3 Teacher: What sound is this?
- 4 Pupils: 'a'
- 5 Teacher: What sound is this?
- 6 Pupils: 'p'
- 7 Teacher: Now they want to become friends, 3 friends, 3 what?
- 8 Pupils: Friends
- 9 Teacher: (Arranges the flash cards one next to the other)
- 10 Now have you seen them?
- 11 Pupils: Yes
- 12 Teacher: They are now friends, eh?

- 13 Pupils: Yes
- 14 Teacher: (sings *I have seen my friend*, and dances). Now he  
15 has found his what? His friend. Are you getting me?
- 16 Pupils: Yes

Although pupils said they 'got' the teacher, they still had a hard time trying to blend the word - 'nap'

Teacher: So, now, what word is this? (Pupils attempted to pronounce the individual sounds)

Teacher: No, it's the word. n-a-p, am I right?

Pupils: Yes

Teacher: ehn?

Pupils: Yes

Teacher: Good, now pronounce the word for me

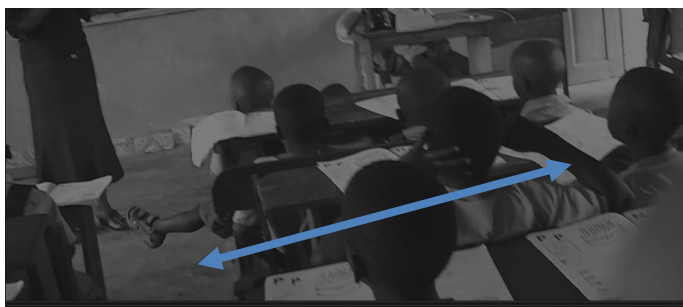
Pupils: (chorus different answers) 'nep', n-a-p

Teacher: hnm, hnm, hnm

Pupils: (More attempts) 'no'

Teacher: ehn?

Pupils: now frowning faces, #4.33 holding their heads in their hands, stretching parts of their bodies etc, etc.

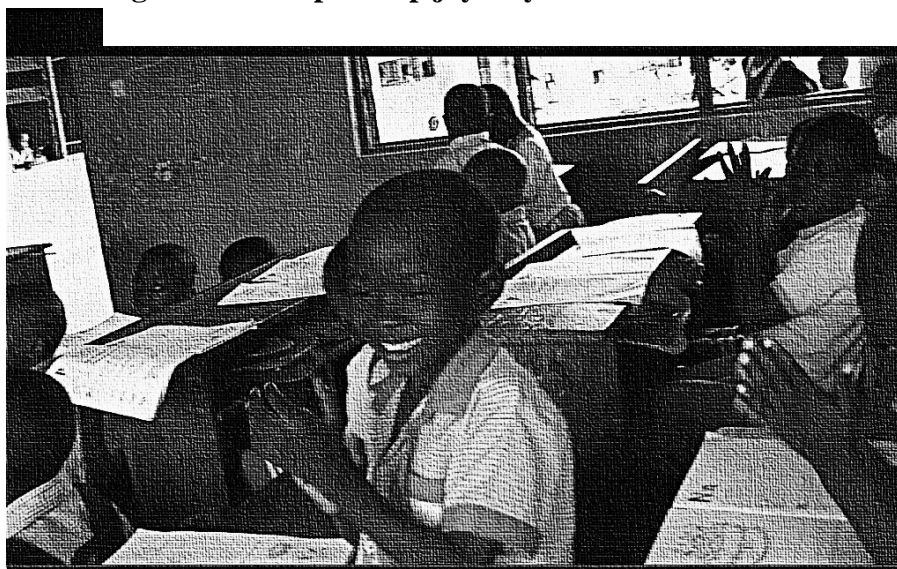


**Figure 4.33: Distressed pupils**

After some efforts, one pupil got the right word, the others joined and teacher and pupils were jubilant.

Pupils: #4.34 Clap clap

**Figure 4.34: Pupils clap joyfully**



The efforts of the teachers obviously yielded improvement in blending skills for the pupils as can be seen in the result below. The teachers expressed hope that there will be greater improvement as the pupils do more blending.

	Group	N	P	Group	N	p
	Control			Phonics		
Negative Ranks		0			0	
Positive Ranks		3	0.01		14	0.00
Ties		89			48	
Total		92			62	

**Table 4.31: Wilcoxon Signed-rank test for Blending**

Table 31 shows that all pupils in the control group had either higher scores in post-test blending or similar scores to what they had in the pre-test; no pupil had a lower score. Only three pupils however had higher post test scores than their pre-test scores, while the remaining 89 pupils had no change in scores ( $p=0.01$ ) implying that the result is statistically significant. Likewise, Table 31 also indicates that zero pupil in the synthetic phonics group recorded lower score in post-test blending than pre-test blending score; 14



pupils had higher post test scores than their pre-test scores, while 48 pupils had similar scores in each test ( $p=0.00$ ). This implies a statistically significant difference between pre- and post-test scores.

	Group	N	p	Group	N	p
	Control			Phonics		
Negative Ranks	2			1		
Positive Ranks	15	0.00		28	0.00	
Ties	19			7		
Total	36			36		

**Table 4.32: Wilcoxon Signed-rank test for Blending (Private schools)**

Table 32 shows that in blending, two pupils in the control group had lower scores than what they had in the pre-test; 15 pupils had higher post-test scores than their pre-test scores and there were 19 pupils had similar scores at post and pre-tests. ( $p= 0.00$ ) indicating a statistically significant difference between pre and post test scores.

In the synthetic phonics group, one pupil had a lower score at the post-test, 28 pupils had higher post-test than pre-test scores. Seven pupils in the synthetic phonics group recorded no improvement in post-test blending over pre-test blending. ( $p=0.00$ ) showing that the difference between the pre and post-test scores is statistically significant.

In both school management types, there were more positive ranks in the synthetic phonics groups than in the control groups showing that the pupils in the synthetic phonics group had greater improvement at the post-test than did the pupils in the control group. However, the improvement in blending appeared to be less than the improvement in phoneme awareness.

Pupil interview also revealed that while some pupils enjoyed blending, as three of the eight said they did, three pupils also said they found blending difficult.

The classroom scenes discussed above showed pupils struggling with blending. It must be noted that those scenes were captured early in the intervention when the pupils had learnt only the first six sounds. Later on, when the pupils had become better skilled in blending, they blended with ease.

In extract 10 below, the teacher guided the pupils step by step to blend the word 'win'. Usually, the teacher would start with the sound of the day, in this case, 'w'. One at a time,

she adds sounds that the pupils had learnt previously making the pupils say each sound as she adds it. When all the sounds have been written, she makes one of the blending signals mutually known to pupils and teacher. At the signal, the pupils blend the word.

In these examples, the signal was when the teacher made a sweeping movement with her finger underneath all the sounds. Extract 10 illustrates the amount of efforts teachers invested in teaching pupils how to blend.

#### **CO Extract 10**

##### **(S4P)**

- 1 Teacher: Now, let's see how we can put these sounds together  
2 because if we put this sound for today, with the other sounds  
3 we have just mentioned, we can make a word.
- 4 Teacher: So now let's see how we can do it. I'll write the  
5 sound on the board, you will give me the sound
- 6 Teacher: Please give me this sound (writes 'w')
- 7 Pupils: 'w'
- 8 Teacher: I can't hear you
- 9 Pupils: louder 'w'
- 10 Teacher: #4.35 writes i
- 11 Pupils: 'i'
- 12 Teacher: (writes 'n')
- 13 Pupils: 'n'
- 14 Teacher: (Pointing to the sounds one by one) Give me this  
15 sound, this sound, and this sound
- 16 Pupils: (correctly pronounce each sound)
- 17 Teacher: (underlines -i-n) So now, you give me this sound  
18 (w) very loud and these two (i-n) together (#4.36 makes a  
19 sweeping movement below the sounds with her finger)



**Figure 4.35: Teacher writes 'i'**



**Figure 4.36: Teacher signals**

- 1 Pupils: w-in
- 2 Teacher: (repeats the sweeping movement) again
- 3 Pupils: w-in
- 4 Teacher: (Emphatically)
- 5 Pupils: win
- 6 Teacher: again
- 7 Pupils: win

Observation in another school showed the teacher using similar steps and patiently guiding the pupils from one sound to the next until they succeeded in blending the word. In this class, the teacher starts by telling the pupils what page they are working on and she checks that everyone is on the right page. She points the attention of pupils to the words as they appear in their workbook. She asks pupils to identify the sounds and show the action for each sound. She then writes them all on the board and guides the pupils to blend each word. She often checks that the pupils pay attention and understand. Noticing some pupils who are distracted, she calls their names and instructs them to pay attention. Pupils are confused at the sound 'e', some giving the letter name and others, the sound. At this point the teacher prods the pupils until they are able to give the correct sound.

**CO Extract 11**

**(S1G)**

Teacher: Open to page 14.

Pupils: (opening and making some noise)

Teacher: Hello children

Pupils: Yes aunty

Teacher: Are we listening? Are you there, are you there?

Pupils: Yes aunty #4.37 every pupil has opened the right page



**Figure 4.37: Every pupil on the right page**


The teacher ensured that the pupils were totally engaged. Instructions given were: see, show me, point to, do the action. All these served to get the attention of the pupils totally focused on the class activities.

**CO Extract 12 (S1G)**

Teacher: show me the sound in your books

Pupils: point to the sound

Teacher: show me the action

Teacher: we have some words, listen carefully. All stand 

Pupils: stand making some noise

Teacher: Let's listen, I'm going to write the words. When I touch it, you give me the sounds and also ..... pronounce the words.

Writes the words-get, gap, peg, rag from the pupil workbook.

Teacher: are we listening? J (name of pupil) look up here.

Teacher: Are we looking? Let's go. Give me the sound

Teacher: #4.38 points at g

Pupils: g

Teacher: #4.38 points at e

Pupils: e

Teacher: #4.39 points to t

Pupils: t



**Figure 4.38: Teacher points at 'g'**

**Figure 4.39: Teacher points at 'e'**



**Figure 4.40: Teacher points at 't'**

### **CO Extract 13**

**(S1G)**

- 1 Teacher: And what word is that?
- 2 Pupils: (make a wrong attempt)

3 Teacher: Okay, you will sound this one, (pointing at 'g') the  
4 first sound loud, and drag these two (underlines et) together  
5 and give me the word. Are we listening?

6 Pupils: Yes

7 Teacher: Okay, let's go. One, two, go

The teacher noticed that the pupils were struggling so she repeated the steps thus:

1 Teacher: g-et

2 Pupils: g-et

3 Teacher: again?

4 Pupils: g-et

5 Teacher: again?

6 Pupils: g-et

7 Teacher: and what word is that?

8 Pupil : Raises hand

9 Teacher: Yes?

10 Pupil: et

11 Teacher: No, we're almost there

12 Another pupil: go

13 Teacher: No, it's not go

14 A third pupil: get

15 Teacher: That's good. Let's give him 'atama' (one clap)

16 Teacher: Alright, g-et is get. You'll give me the sound and  
17 the word again, one, two, go. G-et get, again?

- 18 Pupils: g-et, get
- 19 Teacher: again?
- 20 Pupils: g-et, get. (one pupil blending on the arm)

At this point, noticing the pupil blending on the arm, the teacher changes the blending method from pupil saying the sound and blending to the arm blending method where the teacher says the sounds touching parts of her arm and at the signal, pupils blend the sounds. The teacher instructs the pupils to stretch out their arms as well. All pupils stretch out their arms. Teacher calls out the sounds of the word and blends it. Pupils' first attempt at arm blending is wrong and teacher corrects them.

#### **CO Extract 14**

##### **(S1G)**

- 1 Teacher: We're going to blend it with our hands, one, two, go
- 2 Pupils: (Touching the shoulder blade and the arm) g-et, get
- 3 Teacher: Hmmm? (touching three parts of the arm) G-e-t,
- 4 get. You know we're taking one one when we blend with our
- 5 arms. Since you've gotten the sounds, you take it one one.
- 6 Pupils: g-e t, get
- 7 Teacher: Hello children
- 8 Pupils: Yes Aunty!
- 9 Teacher: so when I give you the sounds, you give me the word.
- 10 Look at me. g-e-t, is what?
- 11 Pupils: get
- 12 Teacher:Again, is what?
- 13 Pupils: Get
- 14 Teacher: Everybody say 'get'

- 15 Pupils: Get
- 16 Teacher: Everybody do it for me,
- 17 Pupils: #4.41 (Blending on their arms) g-e-t, get
- 18 Teacher: again?
- 19 Pupils: Repeat the arm blending, g-e-t, get



**Figure 4.41: Blending on the arm**

The teacher, in the hope that they have now learnt blending with 'g', pointed to g-a-p but was met with silence and rumbling. She needed to do some more work!



**Figure 4.42: Teachers touches 'g'**

Teacher: That's right. The next one, you sound it loud and drag these two together (touches the sound 'g', and #4.42 swipes under ap)

Pupils: Silence, rumbling



Teacher: Everybody give me the first sound

Pupils: g

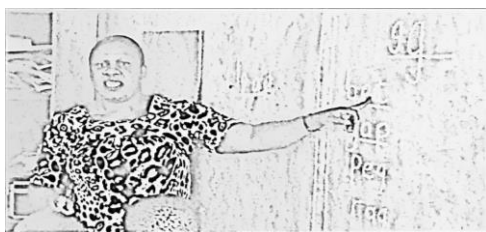
Teacher: this one? ap

Pupils: a-p

Teacher: Again?

Pupils: g-a-p

Teacher: I didn't say one one. I said drag these two (ap) together. We'll do it the same way we did the first one #4.43 (pointing at get)



**Figure 4. 43: Teacher points at 'get'**

#### **CO Extract 15**

#### **(S1G)**

1 Teacher: Are we listening?

2 Pupils:

3 Teacher: alright everybody say 'g'

4 Pupils: 'g'

5 Teacher: Again?

6 Pupils: 'g'

7 Teacher: The first one loud and you drag the two together; g-

8 ap. Everybody say g-ap

- 9 Pupils: g-ap (some pupils said go-ap)
- 10 Teacher's assistant: (loudly) Not 'go'
- 11 Teacher: g-ap
- 12 Pupils: g-ap (some go-ap)
- 13 Teacher: Not 'go' -ap, g-ap
- 14 Pupils: g-ap

They blended using words in their workbooks

#### CO Extract 16



**Figure 4.44: Blending in the workbook**

While this went on in the synthetic phonics school, the control group continued with the rote learning and alphabet name method. A comparison of the post-test results examined above follows using the Mann Whitney U test to ascertain if there was any significant difference between the post-test scores of the control groups and the synthetic phonics groups.

Variable	Group	N	Mean Rank	Sum of Ranks	<i>U</i>	<i>Z</i>	<i>p</i>
Blending	Control Group	92	71.96	6620.50	234	-3.67	0.00
	Synthetic Phonics	62	85.72	5314.50			

**Table 4.33: Mann-Whitney U test for Synthetic and Control Groups' Post-test Performance Scores in Blending (government schools)**

Table 33 presents the results of the Mann-Whitney test which compares the average post-test blending score of the pupils taught with the synthetic phonics method to the average score of their counterparts who were taught with the traditional alphabet learning

method. The mean rank of the control group was 71.96, while that of the pupils taught with synthetic phonics was 85.72. The Mann Whitney U test shows that mean ranks of the two groups in blending were significantly different ( $U = 234, Z = -3.67, p = 0.00$ ). This thus implies that pupils taught with synthetic phonics scored higher in blending than their counterparts exposed to the traditional teaching method. Teaching using the synthetic phonics method significantly enhances blending skills of pupils in the government schools compared to teaching using the traditional method.

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p
Blending	Control Group	36	28.75	1035.00	369.00	-3.22	0.00
	Synthetic Phonics	36	44.25	1593.00			

**Table 4.34: Mann-Whitney U test for Synthetic and Control Groups' Post-test**

#### **Performance Scores in Blending (private schools)**

Table 34 presents the result of between group scores of the synthetic phonics and the control groups of the private schools in blending. The results revealed that the mean rank of the control group was 28.75, while that of the pupils taught with synthetic phonics was 44.25. Mann-Whitney U test indicates that the mean ranks of the two groups in blending were significantly different ( $U = 369.00, Z = -3.22, p = 0.00$ ). As in the government schools, pupils taught with synthetic phonics scored higher in blending than their counterparts who were taught using the traditional method. As such, it can be concluded that teaching with synthetic phonics enhances pupils' blending skills more than teaching with the traditional method.

#### **4.6.3 Burt Reading**

	Group		p	Group	
		N			N
	Control			Phonics	
Negative Ranks	3			8	
Positive Ranks	32		0.00	22	0.04
Ties	57			32	
Total	92			62	

**Table 4.35: Wilcoxon Signed-rank test for Burt reading (Government schools)**

Table 35 shows that at the post test, three pupils in the control group scored lower in Burt reading than they did at the pre-test; 32 pupils had higher post-test scores than their pre-test scores, and 57 pupils had similar scores in each test  $p = .(0.00)$ . This indicates a statistically significant difference between pre and post test scores.

Table 35 equally presents the Wilcoxon signed-rank test which indicates that for the synthetic phonics group, at the post test, 8 pupil scored lower in Burt reading than they did at the pre-test; 22 pupils had higher post test scores than their pre-test scores, and 32 pupils had similar scores in each test. ( $p= 0.04$ ) depicting a statistically significant difference between pre and post test scores.

	Group	N	p		Group	N	p
	Control				Phonics		
Negative Ranks		2				3	
Positive Ranks		26	0.00			27	0.00
Ties		6				6	
Total		36				36	

**Table 4.36: Wilcoxon Signed-rank test for Burt reading (Private Schools)**

Table 36 shows that at the post test, two pupils in the control group scored lower in Burt reading than they did at the pre-test; 26 pupils had higher post-test scores than their pre-test scores. Six pupils in the group had similar scores at the post-test as they did in the pre-test. ( $p=0.00$ ) implying a statistically significant difference between pre and post-test scores.

In the synthetic phonics group, three pupils scored lower at the post-test Burt reading than at pre-test, 27 pupils had higher scores while six pupils had similar scores at both tests. ( $p=0.00$ ) showing that the difference between the pre-test and post-test scores is statistically significant.

The results in Tables 35 and 36 for both government and private schools seem to indicate that the improvement at the post-test was similar for both control and synthetic phonics groups. While the numbers are quite similar for the private schools, the percentages confirm the situation in the government schools. The 34.8% of the pupils in the government control schools had positive ranks in Burt reading and 35.4% of the pupils in the synthetic phonics group had positive ranks. Therefore, the improvement rate appears similar. To ascertain if any group improved more than the other, Mann Whitney U test was performed. The outcome of the test is in Tables 37 – 40.

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p
Burt reading	Control Group	92	71.19	7285.50	270	-.63	0.53
	Synthetic Phonics	62	74.99	4649.50			

**Table 4.37: Mann-Whitney U Test for Synthetic and Control Groups' Post-test**

**Performance Scores in Burt reading (government schools)**

Table 37 shows the outcome of the Mann-Whitney U test performed to find out whether the mean ranks of the synthetic phonics group and the control group in the government schools were similar in Burt reading. The test revealed that the mean rank of the traditional method group was 71.19, while that of the pupils taught with the synthetic phonics method was 74.99. The results indicated that the mean rank of the synthetic phonics group in Burt reading was higher than the mean rank of the control group. In other words, the pupils in the synthetic phonics group had higher scores on the average than those in the control group. However, the difference between the mean ranks in the Burt reading was not statistically significant ( $U = 270, Z = -.63, p > 0.05$ ). This implies that though pupils taught with synthetic phonics scored higher in Burt reading than their counterparts in the control group, synthetic phonics teaching may not produce greater achievement in Burt reading than teaching with the traditional method.

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p
Burt reading	Control Group	36	36.71	1321.50	640.50	-0.09	0.93
	Synthetic Phonics	36	36.29	1306.50			

**Table 4.38: Mann-Whitney U Test for Synthetic and Control Groups' Post-test**

**Performance Scores in Burt reading (private schools)**

In the private schools sample, the mean rank of the traditional method group was 36.71, while that of the pupils taught with the synthetic phonics method was 36.29. The results indicated that the mean rank of the synthetic phonics group in Burt reading was just slightly lower than the mean rank of the control group. As could be anticipated, Mann Whitney U test shows that the difference between the mean ranks in the Burt reading was not statistically significant ( $U = 640.50, Z = -0.09, p = 0.93$ ). The inference from this is that synthetic phonics teaching may not result in greater performance in Burt reading than teaching with the traditional method.

It is not surprising that the post-test scores of pupils taught using synthetic phonics was not significantly higher in Burt reading than their counterparts in the control group. Nor

is it surprising that in the private school sample, pupils in the control group had higher scores than pupils in the synthetic phonics group. In the synthetic phonics classroom, learning is systematic and by the time of the post-test, the classes had not yet completed learning all the sounds, alternatives, and tricky words. Knowledge of those skills is needed to tackle the words on the Burt reading test. From the 7<sup>th</sup> line of the test, (see Appendix C). Pupils in the synthetic phonics group stood at risk of dropping out, and from the word 'shelves' on the 8<sup>th</sup> line of the test, no word is decodable. All the other words required skills which the pupils were yet to learn. The fact that many of them progressed beyond that line showed that they were already extending themselves beyond the skills they have been taught. A child drops out of the test when they have failed to read ten words consecutively. As a result, synthetic phonics taught pupils dropped out of the test faster than the pupils in the control group. Conversely, pupils in the control group learn several words by rote and such words may include many of the earlier high frequency words in the Burt test. This must have resulted in early high scores for the pupils in the control group. This is similar to the findings of Bryne, Freebody and Gates (1992) that at second grade non phonics taught children recognised more real words than decoding phonics pupils but this trend reversed by third grade when phonics taught pupils had learnt and were able to use the decoding skills. By this time, pupils taught with the rote learning method could not match the synthetic phonics taught children at reading.

As noted earlier, there was much focus on blending in the synthetic phonics classroom. The teachers paid sufficient attention to blending exercises as seen in the classroom observation evidence. The evidence also showed much improvement between when the pupils struggled to blend 3-letter (CVC) words and when they effortlessly blended longer words and words with diagraphs. In CO Extract 17, pupils blend longer words effortlessly. The teacher signposts by telling the children they are going to do something. This gives the pupils a hint that something different is coming. She then writes a word with four sounds- longer than the CVC words they had blended thus far. The pupils blend the word with great ease.

**CO Extract 17**

**(S4P)**

Teacher: £ Now, it's time for us to do something£. What sound is this? (writes 'w')

Pupils: 'w'

Teacher: And this one? (writes) 'e'

Pupils: 'e'

Teacher: And this one? (writes 'n')

Pupils: 'n'

Teacher: And this sound? (writes 't')

Pupils: 't'

Teacher: (Smiling) Now you will sound it again, sound it again

Pupils: w-e-n-t (some pupils) w-e-t-t

Teacher: (noticing the t-t) sound it again?

Pupils: w-e-n-t

Teacher: So, you're going to give me #4.45 this one very loud and #4.46 this 3 together

Pupils: **w-ent, went**



**Figure 4.45: Give me this very loud**



**Figure 4.46: Drag these three together**

Blending skills which at first makes it possible for children to read phonetically regular words also enhances the reading of irregular words in time. Therefore, gaining good blending skills by these pupils will ultimately result in good reading skills.

#### 4.6.4 Spelling

Group	N	p	Group	N	p
Control			Phonics		
Negative Ranks	9			5	
Positive Ranks	16	0.18		9	0.41
Ties	67			48	
Total	92			62	

**Table 4.39: Wilcoxon Signed-rank test for Schonell spelling (Government Schools)**

Table 39 shows that at the post test, nine pupils scored lower in Schonell spelling, than they did at the pre-test; 16 pupils had higher post test scores than their pre-test scores and 67 pupils had similar scores in each test ( $p=0.18$ ) showing that there is no statistically significant difference between pre and post test scores.

Table 39 also presents the Wilcoxon signed-rank test comparison of pupils' pre-test and post-test scores in Schonell spelling in the synthetic phonics group. The results showed that five pupils had lower scores at post-test than they did at pre-test, only nine pupils had higher scores while the remaining 48 pupils had similar scores at both pre and post-test. ( $p= 0.41$ ) indicating no statistically significant difference between pre and post-test scores.

Group	N	p	Group	N	p
Control			Phonics		
Negative Ranks	12			12	
Positive Ranks	16	0.09		10	0.23
Ties	8			14	
Total	36			36	

**Table 4.40: Wilcoxon Signed-rank test for Schonell spelling (private schools)**

Table 40 shows that at the post test in the private schools, 12 pupils in the control group scored lower in Schonell spelling, than they did at the pre-test, 16 pupils had higher post



test scores than their pre-test scores and eight pupils had similar scores at both tests ( $p=.09$ ) indicating no statistically significant difference between pre and post test scores.

In the synthetic phonics group, 10 pupils had higher post-test scores than pre-test scores, 14 pupils had similar scores at both pre and post-tests, 12 pupils scored lower at the post-test than at pre-test. ( $p=.23$ ) implying no statistically significant difference between pre and post-test scores.

In both government and private schools, more pupils in the control groups had positive ties in Schonell spelling than did pupils in the synthetic phonics group. Looking at the numbers in the Table makes this obvious. In Table 38, 17.4% of pupils in the control group had positive ties as compared to 14.5% in the synthetic phonics group. Overall, there was no significant difference in the pre and post-test performance of either group in both school management types.

It would appear as though pupils in the synthetic phonics group did not improve in spelling. This is to be expected though as the spelling test is not phonics based. Pupils learning by rote and a whole word method are more likely to perform better on such a test than those on a phonics programme because of the constant spelling drills which are a part of their daily learning. If the spellings had been with words that could be sounded out, the hypothesis would have been that the children who could sound the letters and blend would do better on such a spelling test.

The sounding aspect of the programme was as well implemented by the teachers as the phoneme awareness and blending aspects. This is revealed in the data from classroom observation which show teachers dutifully explaining to pupils how to identify what sounds were present in specific words and what position such sounds occupy in those words. When pupils know the sounds in words dictated by the teacher and the position of each sound in a word, their spellings are more accurate.

Also, teachers' comments at the focus group discussion revealed that the teachers were satisfied with pupils' progress in spelling. At the post intervention focus group, the teachers claimed that with the use of synthetic phonics, pupils' ability to recognise sounds and read words tremendously improved. According to the teachers, pupils who had initial difficulty in identifying and in spelling words experienced improved skills in sounds and

letter recognition as well as word identification. The teachers explained that synthetic phonics helps to improve pupils' spelling and writing ability, including their handwriting.

**FG Extract 8:**

1 Participant 4: it makes my teaching to be effective, it  
 2 facilitates (ehmmn), it facilitates reading and writing (.)  
 3 especially for those children that cannot be able to write  
 4 so you see constant writing, you know when you give them the  
 5 sounds, you give them the written aspect of it as well. So  
 6 it helps the children actually to read and write, also in  
 7 hand writing aspect.

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p
Spelling	Control	92	78.54	7225.50	276	-0.49	0.62
	Synthetic Phonics	62	75.96	4709.50			

**Table 4.41: Mann-Whitney U Test for Synthetic and Control Groups' Post-test**

**Performance Scores in spelling (government schools)**

In the government schools sample, the mean rank of the control group was 78.54, while that of the pupils in synthetic phonics group was 75.96. The results therefore suggest that pupils taught with synthetic phonics scored slightly less on the average in spelling than did their counterparts in the traditional method group. As would be expected, the difference between the mean ranks of the two groups in spelling was not statistically significant (U = 276, Z = -.49, p = 0.62).

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p
Spelling	Control	36	41.01	1476.50	485.50	-1.86	0.06
	Synthetic Phonics	36	31.99	1151.50			

**Table 4.42: Mann-Whitney U Test for Synthetic and Control Groups' Post-test**

**Performance Scores in Schonell Spelling (Private schools)**

Table 42 shows the Mann-Whitney U test conducted to investigate whether pupils exposed to synthetic phonics would score, on average, higher in spelling than the pupils taught with the control group in the private schools. The results revealed that the mean rank of the control group was 41.01, while that of the pupils taught with synthetic phonics was 31.99. This therefore suggests that pupils taught with synthetic phonics scored less

in spelling at the post test than did their counterparts in the traditional method group. However, the results also indicated that difference between the mean ranks of the two groups in spelling was not statistically significant ( $U = 485.50$ ,  $Z = -1.86$ ,  $p = 0.06$ ).

In both government and private schools, pupils in the synthetic phonics groups scored less in Schonell spelling than did their counterparts in the control schools.

Spelling involves hearing the sounds in words and being able to write the sounds down in the order that they occur in the words. Sounding is the aspect of synthetic phonics teaching which enhances pupils' spelling skills. Sounding involves identifying the sounds that are present in words as well as recognising the position of such sounds in the words. In order to find out the possible reasons for the seeming poor performance of synthetic phonics taught pupils in spelling skills, I will explore this aspect in closer details using the classroom observation data supported by the teachers' comments at the focus group discussion.

Classroom observation data shows that teachers engaged pupils in sounding words and that that the sounding aspect of the training was well implemented. In each of the classrooms, teachers can be seen training the pupils to observe the presence of sounds in words, count how many sounds there are in a word, and determine the position of the sound in a word. In CO Extract 18, the class has just finished learning the sound 'ng'. The teacher guides the children off the action and games which accompanied the teaching of the sound and the writing in the air and on friends' backs. First, she ensures that she has the attention of all pupils. Then she tells them they are about to do something different from the preceding activities. When the pupils realise it is 'sounding' time, they all sit upright and get ready to give the answers. As the teacher mentions the first word, some pupils shout and raise their hands, each in the hope of being the one the teacher selects to answer the question. The teacher selects one pupil, he correctly says how many sounds there are in the word and also says the order of the sounds, finishing up by blending the sounds into the word.

**CO Extract 18**

**(S3P)**

- 1 Teacher: So, are we together?
- 2 Pupils: Yes
- 3 Teacher: We are together?
- 4 Pupils: <sup>↑</sup>Yes
- 5 Teacher: You are going to tell me how many sounds you are
- 6 hearing. How many sounds are you hearing in 'ring', 'ring',
- 7 'ring'?
- 8 Pupils: (All competing to be chosen to answer) Aunty, Aunty,
- 9 Aunty
- 10 Teacher: #4.47 +Points at a pupil
- 11 Teacher: How many sounds are you hearing in 'ring'
- 12 Pupil: 3 sounds.
- 13 Teacher: *Alright* give us the sounds
- 14 Pupil: #4.48 r-i-ng 'ring'
- 15 Teacher: Just give him *atama*. That's very good
- 16 Pupils: #4.49 Clap



**Figure 4.47: Teacher points at pupil at the back**



**Figure 4.48: Correct answer**



**Figure 4.49: Pupil counts sounds**

As if the success of their colleague stirs the rest of the class to action, at the next word to be sounded, the class nearly mobs the teacher with request to be the chosen one. They jump up, shout, and wave their hands in the air. The teacher chooses one pupil who makes an attempt. The first sound is correct but not the second. Given another chance to try, the pupil may correctly sound the word but with more than enough competitors, the teacher briskly offers the turn to another pupil. The pupil succeeds in sounding the word and also gets the reward of a handclap.

### **CO Extract 19**

#### **(S3P)**

- 1 Teacher: (Class), how many sounds are you hearing in 'sing',
- 2 sing'
- 3 Pupils: #4.50 Aunty, Aunty, aunty
- 4 Teacher: #4.51 + points at a pupil
- 5 Pupil: s-a
- 6 Teacher: moves on and # 4.52 selects another pupil
- 7 Pupil: s-i-ng
- 8 Teacher: That's very good. Will give you what?
- 9 Pupils: Sing



**Figure 4.50: All Motivated to answer**



**Figure 51: Teacher selects a pupil**



**Figure 4.52: Teacher selects another pupil**

Although no instruction to clap, some expected to clap and actually did



**Figure 4.53: No instruction to Clap?**

Building on the success of the previous sounding, teacher calls out a third word- bang-. This time, there is some quiet as pupils counted on their fingers to be sure, probably because of the previous wrong attempt by their colleague. They do not want to be wrong. Teacher decides to focus on her left side of the class as it appears quieter there. Fewer hands are raised and fewer still jump up to compete for the teacher's attention from that part of the class. A pupil makes an attempt but is not audible. Others then raise their voices calling the teacher's attention and raise their hands, volunteering to provide the answer. Teacher nominates a pupil in the front row. She mutters something but no one hears. The class shouts wildly and struggles for the teacher's attention but the teacher

decides to give the pupil she nominates a longer turn. The pupil offers an answer which is obviously not correct though audible to only the teacher and the pupils sitting very close.



**Figure 4. 54 Pupil seriously counting the sounds on her fingers**

#### **CO Extract 20**

#### **(S3P)**

Teacher: Okay, How many sounds are there in 'bang'? Repeats the word 3 times as no one responded quick enough. Pupils sat counting on their fingers.

Pupil: Made an inaudible attempt

Teacher: I want someone that will speak loud, 'bang'

Pupils: (All at once) aunty, aunty,

Teacher: U (name of pupil) (now) give me the answer

Pupil: Inaudible to the class

Pupils: Aunty, aunty, aunty

Teacher: (To the class) hold on. (To the pupil she had called) Oya, say it

Pupils: Aunty, aunty, aunty

Pupil: Makes a wrong attempt

Pupils:           Aunty, Aunty

Teacher: To pupil (say it again) (to the other pupils) Wait

Pupil:            Another wrong attempt

At this point, the teacher offers the turn to another pupil, she selects a pupil but remembers that the pupil had answered a question previously and so chooses another pupil. The pupil does not get the answer but sounds a totally different word. The teacher repeats the word she wants and many of the other pupils, still eager to answer continue beckoning on the teacher to select them.

1 Teacher: (Selects a pupil and immediately changes her mind)

2 No, you've said your own. £ Selects another pupil B (pupil's  
3 name)

4 Pupil:            b-a-ck

5 Teacher: No, I say bang #4.55 (demonstrates bang). What sound  
6 do you learn today?

7 Pupils:           Aunty, Aunty, Aunty (many of them standing)

8 Teacher: (Goes to the board and points to the sound). What  
9 sound is this?

10 Pupils:           Aunty, aunty

11 Teacher: Goes to a pupil S (name of pupil) give it to me

12 Pupil:            b-a-ng

13 Teacher: Will give you what?

14 Pupil:            bang

15 Teacher: bang, let's clap for her





**Figure 4.55: Teacher demonstrates bang**

As seen in the foregoing, the sound counting aspect also received much attention as the teachers knew that when the pupils are able to identify the number of sounds in a word, they will be able to do dictation exercises successfully thus enhancing their spelling skills. The teachers used games to make the counting sessions engaging. The pupils often counted on their fingers as seen in figure 55 above.

In the next extract, teacher calls out a word and asks a pupil to say the number of sounds. Pupils struggle with the diagraph which they can see on the printed page of their workbook. The pupil says there are four sounds but the teacher knows there are three. She does not argue but tells the pupil to count the sounds. Pupil makes to count, gets to three and cannot find a fourth sound and she sits down. Another pupil tries but says a single sound in place of the diagraph. Teacher repeatedly shows them the sound and says it over and over before a pupil finally gets the point. In this instance, it may have been easier for the teacher to teach the sounding without the pupils looking into the work book. If the teacher had called out the word, pupils would have found it easier to count the sounds; seeing what appeared like four sounds and counting them as three was a hard task for the pupils at that stage.

#### **CO Extract 21**

**(S3P)**

Teacher: 'Wing', how many sounds are there, wing, can you give me the sounds?

Pupils: (.)

Teacher: 'wing', 'wing'

Pupils:           Aunty, Aunty, Aunty

Teacher: E (name of pupil)

Pupil:            Four

Teacher: Four sounds? Okay, give it to me if you say four

Pupil:            w-i-n (sits down)

Teacher: No, I said wing, #4.56 demonstrates by lifting her shoulders 'wing', 'wing', (emphasises the -ng and selects another pupil)

Pupil:            w-i-g

Teacher: 'ng', 'ng'. Listen, all say 'ng' #4.57 (teacher does the action for 'ng')

Pupils:           ng

Teacher: Who will give us the sound in 'wing'?

Pupil:            w-i-ng

Teacher: *One clap, one clap, long clap*



**Figure 4.56: 'I said 'wing'**



**Figure 4.57: Teacher repeats action for 'ng'**

It did appear that the teacher eventually drove the point home because immediately she mentioned the word, their hands shot into the air shouting for the teacher's attention. The first pupil she selected got the answer but was hesitant so she called on another pupil who quickly and confidently tackled the next word.

## CO Extract 22

(S3P)

- 1 Teacher: Who will give us the sounds in 'hang'?
- 2 Pupils: Aunty, Aunty, Aunty
- 3 Teacher: Name of pupil
- 4 Pupil: h-a-ng
- 5 Teacher: (looks out for another volunteer) Hen, hen,  
6 (Pupil's name)
- 7 Pupil: #4.58 h-a-ng, hang
- 8 Teacher: she said h-a-ng, hang; give her *atama*



Figure 4.58: Show of fingers for 'hang'

### ***4.6.5 Additional sounding exercises to aid spelling***

The sounding exercises often incorporated some fun and games while it also gave the pupils time to think and engage. One of the games involved the children doing 'thumbs up' if the sound was present in the word the teacher called out and 'thumbs down' if the sound was not present in the word.

In the CO Extract 23, the teacher instructs the pupils to listen carefully to the words she will call out. In their workbooks, pupils should cross out any word which does not have the required sound 'n' in it. If the word has the sound, pupils thumb up, if not, when the teacher calls out the word, they thumb down, and cross the word out using their pencils.

**CO Extract 23**

**(S2G)**

1 Teacher: Do you see the pictures? Can you see the pictures?

2 Pupils: Yes.

3 Teacher: Very good children. (Notices a pupil who was  
4 distracting others) Hey, what are you looking for, go and sit  
5 down.

6 Now, the pictures you are seeing there, some of (the  
7 words) have the sound 'n', and some don't. So, when I call  
8 it, if the sound is in it, what do you do?

9 Pupils: #4.59 Thumbs up.

10 Teacher: Very good, very good children. Now do we have 'n'  
11 in pie?

12 Pupils: No

13 Teacher: What do you do?

14 Pupils: #4.60 Thumbs down, Cross it out



**Figure 4.59: Thumbs up**



**Figure 4.60: Thumbs down**

Another game for sounding was for pupils to fold their arms at their back as the teacher calls out the word to blend. The game helped the pupils to focus on the word as they could not do much else without moving their hands. The period when the hands were folded at their backs also served as a time to reflect on the words. During this time, pupils are focused enough to think of how many sounds there are in a particular word the teacher calls out.

In the next extract, the teacher calls out words and the pupils show how many sounds there are in the words by lifting the numbers of fingers which correspond with the number of sounds in the words. This exercise helps children to blend and also to spell phonetically regular words.

#### **CO Extract 24**

**(S2G)**

- 1 Teacher: Hands at your back
- 2 Pupils: #4.61 Pupils responded to the instruction by
- 3 folding their arms at their backs
- 4 Teacher: How many sounds do we have in the word 'nip'?
- 5 Ready:: steady:::, go
- 6 Pupils: (show three fingers and say) three
- 7 Teacher: Beautiful, beautiful children. Now how many sounds
- 8 do we have in the word:: 'ant'
- 9 Pupils: 3, 2, 1, 3, 2
- 10 Teacher: (Waits till the chorus changed to 3) three:: sounds.
- 11 Three what?
- 12 Pupils: three sounds.
- 13 Teacher: Beautiful, beautiful children



**Figure 4.61: arms at your back**



**Figure 4.62: All show your fingers**

Teacher: How many sounds are in 'wing' 'wing'?

Pupils: (chorus) three, four

Teacher: Okay, don't tell me, just show me your fingers

Pupils: #4.62 Show fingers

In many classes, sounding went on very smoothly. In the Extract below, pupils sounded all the words effortlessly.

#### **CO Extract 25**

**(S2G)**

Teacher: Now how many sounds do we have in the word 'win'

Pupils: #4.63 Aunty, aunty, Aunty

Teacher: (Nominates a pupil) yes you

Pupil: 3

Teacher: 3 sounds? Can you sound it? He doesn't know it

Pupil: Attempted but failed

Teacher: #4.63 (moves her body and covers the board)£Don't look at the board£ nominates another pupil

Pupil: w-i-n, win

Teacher: That's very good



**Figure 4.63: Teacher attempts to cover the board with her body**

The teacher introduces longer words for sounding and the pupils were able to sound them. In CO Extract 26 , the teacher writes words with four sounds, one sound longer than the usual CVC words and asks the pupils to sound them, identify the position of the sound in the words, and count the number of sounds.

#### **In CO Extract 26**

**(S4P)**

Teacher: Now, how many sounds do we have in the word 'went'?

Pupils: Aunty me, Aunty, me

Teacher: Selects a pupil

Pupil: #4.64 Four (other pupils trying to take the turn)

Teacher: Okay, he says four, just leave him, tell us the sounds

Pupil: w-e-n-t, went

Teacher: Very good. (To pupils who jumped to the front in order to be recognised for answering questions) Go and sit down. Now, in what position can you hear 'w' in 'went'

Pupils: (Some raising hands, others chorus) In the beginning

Teacher: (smiles and shook her head, satisfied)



**Figure 4.64: Four sounds in 'went'**

The teacher writes a word with four letters and asks the pupils to sound it out. The pupils sound out three letters and the teacher, feigning surprise, says but she can see 4 letters, why do the pupils sound 3. The pupils say there are 3 sound but one pupil agrees with the teacher and says there are 4 sounds. The rest of the class shout 3. Teacher instructs them to count the sound and agrees with them that there are three sounds, a double occurrence of the same consonant is sounded once.



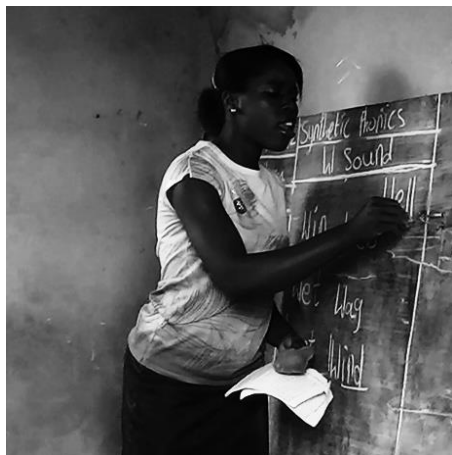
**CO Extract 27**

**(S4P)**

- 1 Teacher: Now let's sound this one again, please sound it?  
2 (writes 'w')
- 3 Pupils: 'w'
- 4 Teacher: Again?
- 5 Pupils: 'w'
- 6 Teacher: Writes 'e'
- 7 Pupils: 'e'
- 8 Teacher: Writes 'll'
- 9 Pupils: 'l'
- 10 Teacher: Ha ha, you say 'l', but me, I see two 'll'
- 11 Pupils: It's one
- 12 Teacher: You say it's one, me , I'm seeeing 2 and you're  
13 telling me it's one
- 14 Pupils: It's one.
- 15 Teacher: Ha, but I see two
- 16 Pupil: Two
- 17 Teacher: #4.65 Yes, he's correct, I'm seeing two
- 18 Pupils: It's one
- 19 Teacher: Okay, this two 'll' is equal one :::::
- 20 Pupils: sound
- 21 Teacher: Now, how many sounds do we have in 'well'?
- 22 Pupil: three

23 Teacher: count

24 Pupil: w-e-ll



**Figure 4.65**

Sounding instruction included guidance on finding the position of the sound in words. The teacher asks the pupils the position of the sound 'w' in swim, a bit tricky.

As shown above, teachers invested much time in the teaching of spelling skills via sounding i.e., identifying sounds in words, recognising the position of specific sounds in words, and counting the number of sounds in a word. It would have been expected that since the pupils performed very well in these class activities, they would have high scores in the Schonell spelling test. However, this was not so. They rather appeared to have made no progress in spelling between the pre-test and the post-test. And also, on the average, they scored lower than the pupils in the control group.

Just as in the case of the Burt reading test, the words in the Schonell spelling test required the pupils to have learnt more alternative ways of writing the sounds and other synthetic phonics skills than they had been taught in order to be able to segment the words. They also needed more experience in independent writing. At the time of the test, the teacher was pleased if the pupils knew one way of representing a sound. Emphasis is on the process rather than on the finished product. For example, when the pupils start learning to write, the teacher does not show disapproval if during dictation exercises the pupils write 'cat' or 'kat', the emphasis is on knowing at least one way of representing the sounds they hear in words. The same goes for alternative spellings e.g.

'bloa' for 'blow', 'siet' for 'sight'. This stage is accepted as a part of the process, a part that the pupil would outgrow as they progress in their learning. As a result, their writing development when the post-test was such that the teacher may accept the word 'well' if written as 'wel' and the word 'hay' if written as 'hai'. It was not expected that they would be able to spell many of the words in the Schonell test at the time of the post-test. Even though the pupils misspelt many of the words resulting in low test scores, their writing development is on course by the standards of the programme they were being taught – synthetic phonics. This explains why there seems to be a disparity in the pupils' performance and the teachers' comment regarding the spelling skills of the pupils.

**FG Extract 9:**

- 1 Participant 4: it makes my teaching to be effective, it
- 2 facilitates ehmmn, it facilitates reading and writing (.)
- 3 especially for those children that cannot be able to write
- 4 so you see constant writing, you know when you give them the
- 5 sounds .you give them the written aspect of it as well. So
- 6 it helps the children actually to read and write, also in
- 7 hand writing like aspect. It helps them, it actually
- 8 increases their performance, just like my sister has just
- 9 said, it increases their level () of performance. (.)
  
- 10 Participant 3: the pupils are trying(.) even before now they
- 11 cannot do dictation, but now if you dictate for them the
- 12 sounds, they will be able to write it by themselves.

Teachers were pleased at the improvement made by the pupils within the intervention period. Their knowledge of the principles of synthetic phonics and the fact that they had experienced the effectiveness of these principles made the teachers confident that the pupils were making good progress in spelling skills.

A further confirmation that the writing aspect was well implemented by the teachers and learnt by the pupils came from the pupil interview. Three pupils in the synthetic phonics group said sounding, spelling, or dictation was their favourite part of synthetic phonics.

#### **4.7 Summary of findings**

The findings in this study support the conclusions of Ekpo et al (2007), that reading skills of Nigerian pupils is low. It lends weight to the concern in research literature that Nigeria may not achieve the millennium development goal of literacy for all by 2015.

Results of reading skills tests performed at the start of this study showed that pupils' performance was indeed poor in all aspects of the test. In spite of the fact that majority of the pupils (79.2%) had previous education, usually a minimum of two years of nursery school, most of the pupils had a zero score in each of the four aspects of reading skills measured in the study. This was true for both government and private schools and as these schools together form the provider of education for the majority of pupils who are beginning school in Nigeria. Although the scores for the private schools were better, all scores revealed that pupils' reading skills was low. In the government schools, above 70% of pupils had zero pre-test scores in each of the four tests. In the private schools, over 20% of the pupils had zero pre-test scores.

The post test scores of the pupils suggest that the synthetic phonics method of teaching enhances the teaching and learning of literacy skills. Pupils in the synthetic phonics groups significantly outperformed the control groups in phoneme awareness and blending skills. These two skills are known as the foundational skills for word recognition. The pupils were able to blend the words in the oral sound blending test more than their counterparts in the control groups. As even the teachers agreed, knowledge of the sounds is basic to learning to read and once children know the sounds, and are able to blend them together, it can be said that they already have the foundation for being able to read. On the contrary, in some cases, pupils in the control groups who fell behind in blending were able to read longer words than the ones in the blending test. While the words in the blending

test were of the CVC structure, the words in the Burt reading grew gradually longer and less decodable for the phonics taught children. It would baffle an ordinary observer at the tests how a pupil may be able to read 'shelves' or 'tongue' and the same pupil is unable to read 'chin' and 'tap'. However, the mystery is solved when the researcher explains that the pupils in the control group have been taught those words by the drill method. They can only recognise the words that they have been taught. When they encounter words that they have not been taught, they stare at the words and skip such words. On the contrary, phonics taught pupils would make attempts at sounding out the words. They only fail where words contain sounds that they have not yet been taught. Even then, they make attempt to read such words by blending the sounds they know. Although there was no significant difference in the scores of pupils in the synthetic phonics group and those in the control group in Burt reading and Schonell spelling tests, it is very likely that as the phonics taught pupils learn more sounds and alternative spellings, they will surpass the pupils in the control group. This is because as earlier mentioned, those in the control group will always need the teacher or someone who knows a word to teach them that word the first time they encounter it. However, synthetic phonics taught children will be able to read more and more words as they learn more sounds and alternatives. Each additional sound learnt provides the pupil the opportunity to read and spell several additional words. For example, having learnt the 'magic e' rule which enables the pupil to read 'name', the pupil can extend this to read 'fame, tame, gaze, blade, 'scale' etc. That same rule is sufficient for the child to read 'code', 'strode', 'smoke', mite', 'cube', etc. Unlike the phonics taught pupil, the pupils in the control group would need to be taught the words one by one.

Just like reading skills, writing skills is also developing for the synthetic phonics taught pupils. As they learn new sounds and alternative spellings and are encouraged to do independent writing, the pupils develop their word writing skills. Although at first they may use incorrect forms of spelling, as the teacher acknowledges their ability to hear the sounds in words and encourages them to learn the appropriate spelling for the sounds they hear in words, they gradually develop their word writing skills. This is consistent with the theory of the zone of proximal development theory where the teacher acts as a guide in helping the pupil reach their next level of learning. Because pupils are included in the

learning process, they soon begin to own the knowledge and become independent word readers and writers.

Contrary to claims that phonics teaches pupils to call words without meaning, the stories and actions which accompany the teaching, and the pupils' responses observed in the classroom showed that even L2 pupils gain vocabulary and comprehension early in the synthetic phonics classrooms.

#### **4.8 Conclusion**

This chapter analysed and interpreted the findings of the study regarding pupils' reading test scores. First, it established the need to have separate analyses for the two different school management types. To do this, it explored pupil's personal circumstances of age and gender, family socioeconomic background and compared them across the school management types. It also examined the improvement in scores between the pre-test and post test scores of pupils in the synthetic phonics groups and the control groups and the difference between the improvement of the synthetic phonics groups and the control groups. It found that the synthetic phonics groups achieved greater improvement in their knowledge of sounds and in reading. The next chapter probes the influence, if any, of pupil's personal circumstances of age and gender, family socioeconomic background and teacher factors of qualification and years of experience on the improvement of pupils taught with the synthetic phonics method.

## **Chapter 5. Effect of Gender and other factors**

### **5.1 Introduction**

This chapter presents and analyses data regarding the influence of pupil's personal circumstances of age and gender, family socioeconomic circumstances and teachers' qualification and length of experience on improvement in reading skills. In addition, the chapter probes the pupils' and teachers' attitudes towards the adoption and integration of synthetic phonics in enhancing the teaching and learning of English among Primary One pupils. This is because teachers' attitude has a great influence on the implementation of classroom teaching interventions. Hence, this chapter also presents the findings of the study concerning the attitudes of the teachers and the pupils in the intervention group (both in the government and private schools) towards the use of synthetic phonics method in teaching and learning English language. The data concerning the attitudes of teachers and pupils were gathered from the focus group discussion of the teachers who used the synthetic phonics in their classrooms, interview of pupils taught using synthetic phonics, and classroom observation. Five teachers (two from the government and three from private schools) were engaged in two focus group discussions - one at the start and a second one at the end of the intervention period. The second discussion was attended by four of the teachers. The pre-intervention focus group explored the teachers' method of teaching before the training in synthetic phonics, the extent of literacy attainment of the pupils, and possible causes of poor reading in pupils. It also sought teachers' views of the method they had just been trained in; challenges they envisaged in the course of implementation, and possible solutions to such challenges (Appendix J).

The major issues in the post-intervention discussion were the teaching methods past and current, comparison of their previous method to the synthetic phonics method, perceived benefits of the synthetic phonics method to the teachers and to the pupils, perceived disadvantages, and challenges they encountered in using the synthetic phonics method and if and how the challenges were resolved (Appendix K). The focus group discussions were anchored by the researcher who at each time was guided by a self-developed question-guide containing seven unstructured open-ended questions (Appendix J and K). The responses of the teachers, as mentioned earlier, were tape recorded and later transcribed for further analysis in relation to the research questions vis-à-vis the focus group discussion question-guide.

The chapter also explores the classroom observation data to seek answer to how the teachers implemented the synthetic phonics method and if there were differences in the modes of implementation adopted by the teachers.

## 5.2 Effect of Gender on Groups' Performance in Reading Skills

Is there any significant difference in the improvement in the reading skills of pupils taught with synthetic phonics based on gender?

In order to answer the question if there were gender differences in the improvement in reading skills of pupils in the different groups, I looked in the classroom observation data but found no evidence of any one gender showing greater keenness to learn or answering more questions in class. The focus group discussion of teachers offered no answer, nor did the pupil interview where all pupils said they enjoyed and learnt with the synthetic phonics method. Therefore, I performed statistical analysis on the test results of the pupils using gender as a variable. The tests were performed to investigate whether male or female pupils had significantly higher levels of improvement in reading skills when taught using the synthetic phonics method. The results of the tests follow.

Variable	Gender	N	Mean Rank	Sum of Ranks	U	Z	p
Phoneme awareness	Male	32	27.58	882.50	354.5	-1.77	0.08
	Female	30	36.68	1100.50			
Blending	Male	32	29.16	933.00	405	-1.44	0.15
	Female	30	34.00	1020.00			

**Table 5.43: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Phoneme awareness and blending (government schools)**

Table 43 present the results of the Mann Whitney U test which compares the post-test scores in phoneme awareness and blending based on the gender of the pupils in the synthetic phonics group. The results reveal that in the synthetic phonics group, the mean rank of the males was 27.58 while that of the females was 35.68. The results thus suggest that the post-test score of female pupils was higher when compared with that of their male counterparts. However, this difference was not statistically significant ( $U = 354.5$ ,  $Z = -1.77$ ,  $p > 0.05$ ). The results seem to suggest that the performance of pupils taught with the synthetic phonics method in phoneme awareness may not be influenced by gender.



Moreover, in blending, the results indicate that within the synthetic phonics group, the mean rank of the males was 29.16 and the female pupil had a mean rank of 34.00. The Mann Whitney U results show that there was no significant difference between male and female pupils' post-test scores in blending ( $U = 405$ ,  $Z = -1.44$ ,  $p = 0.15$ ). Although this seems to imply that pupils' improved performance in blending may not be influenced by gender, a comparison of the pupils' pre-test scores suggests differently. At the pre-tests, females performed significantly higher than males ( $p=0.03$ ). A lack of significant difference in post-test scores therefore implies that the males have made considerable improvement above the female pupils.

Variable	Gender	N	Mean Rank	Sum of Ranks	U	Z	p
Post Burt Reading	Male	32	28.44	910.00	382.00	-1.53	0.13
	Female	30	34.77	1043.00			
Post Schonell spelling	Male	32	30.39	972.50	910.00	-726	0.47
	Female	30	32.68	980.50			

**Table 5.44: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Burt Reading and Schonell Spelling by Gender (government schools)**

In Table 44, the Mann Whitney U test shows the result of the post-test scores in Burt reading and Schonell spelling based on the gender of the pupils in the synthetic phonics group. The results reveal that in the Burt reading test, the mean rank of the post test of male pupils was 28.44 while that of the females was 34.77 signifying that the post-test score of female pupils was higher than that of the male. However, this difference was not statistically significant ( $U = 382.00$ ,  $Z = -1.53$ ,  $p > 0.05$ ). The results suggest that the improvement of pupils taught with the synthetic phonics method in Burt reading may not be influenced by gender.

In Schonell spelling, the results show that within the synthetic phonics group, the mean rank of the females was 32.68 and the male pupils had a mean rank of 30.39. Furthermore, the results show that, in the synthetic phonics group, there was no statistically significant difference between male and female pupils' post-test scores in Schonell spelling ( $U = 910.00$ ,  $Z = -726$ ,  $p = 0.47$ ). By inference, pupils' improved performance in spelling would not be influenced by gender.

Variable	Test	Gender	N	Mean Rank	Sum of		Z	p
					Ranks	U		
Phoneme Awareness	Pretest	Male	21	14.48	304.00	73.00	-2.71	0.01
		Female	15	24.13	362.00			
Blending	Posttest	Male	21	16.52	347.00	116.00	-1.34	0.18
		Female	15	21.27	319.00			

**Table 5.45: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Phoneme Awareness and Blending by Gender (private schools)**

The results in Table 45 present the results of the Mann Whitney U test which compares the post-test scores in phoneme awareness and blending based on the gender of the pupils in the private schools. The results reveal that in the synthetic phonics group, the mean rank of the males was 14.48 while that of the females was 24.13. The results thus suggest that the post-test score of female pupils was higher when compared with that of their male counterparts. Furthermore, the Mann Whitney U tests reveals that there is a significant difference in the post-test scores of male and female pupils in the synthetic phonics group ( $U = 73$ ,  $Z = -2.72$ ,  $p = 0.01$ ). The results thus suggest that the performance of pupils taught with the synthetic phonics method in phoneme awareness would be influenced by gender.

In blending, the results indicate that within the synthetic phonics group, the mean rank of the males was 16.52 and the female pupil had a mean rank of 21.27. The results show that, in the synthetic phonics group, there was no significant difference between male and female pupils' post-test scores in blending ( $U = 116.00$ ,  $Z = -1.34$ ,  $p = 0.18$ ). The results imply that pupils' improved performance in blending would not be influenced by gender.

	Gender	N	Mean Rank	Sum of		Z	p
				Ranks	U		
Burt reading	Male	21	14.57	306.00	75.00	-2.66	0.00
	Female	15	24.00	360.00			
Schonell spelling	Male	21	14.38	302.00	71.00	-2.87	0.00
	Female	15	24.27	364.00			

**Table 5.46: Mann Whitney U test Comparison of Synthetic Phonics Group's Post-test Scores in Burt Reading and Schonell Spelling by Gender (private schools)**

In Table 46 Mann Whitney U test shows the result of the post-test scores in Burt reading and Schonell spelling based on the gender of the pupils in the synthetic phonics group. The results reveal that in the Burt reading test, the mean rank of the post test of male pupils was 14.57 while that of the females was 24.00 signifying that the post-test score of female pupils was higher than that of the male. Also, this difference in post-test reading scores between male and female pupils in the synthetic phonics group was significant ( $U = 75.00$ ,  $Z = -2.66$ ,  $p = 0.00$ ). The results suggest that the improvement of pupils taught with the synthetic phonics method in Burt reading could be influenced by gender.

In Schonell spelling, the results show that within the synthetic phonics group, the mean rank of the females was 24.27 and the male pupil had a mean rank of 14.28. Furthermore, the results show that there was a significant difference between male and female pupils' post-test scores in Schonell spelling ( $U = 71.00$ ,  $Z = -2.87$ ,  $p = 0.00$ ). By inference, pupils' improved performance in Schonell spelling would be influenced by gender.

In the government schools, there was no influence of gender on the improvement of pupils in synthetic phonics group at post-test. To the contrary, the synthetic phonics group of the private schools samples showed evidence of gender influence as there was statistically significant gender influence on the improvement in phoneme awareness, Burt reading, and Schonell spelling. However, it is difficult to attribute this difference in improvement to the synthetic phonics method as the pre-test scores also showed significant differences in similar directions (phoneme awareness, Burt reading, and Schonell spelling).

### **5.3 Other Factors**

This section provides findings which answer the question: Do pupil personal circumstances, family background, and teacher circumstances influence the improvement of pupils taught with synthetic phonics?

As discussed in the literature review, other factors are known to influence pupil's educational progress, and this includes progress in reading skills. Hence the question on the influence of these factors on the improvement in reading skills of pupils taught with synthetic phonics method. To answer this question, I analysed the post-test scores of pupils in the synthetic phonics group in each of the two school management types based on the factors: parent literacy, attendance at private lesson after school, pupil previous

education, availability of reading books in pupils' homes, pupils reading aloud to others at home, and others reading aloud to pupils at home. Teacher factors investigated quantitatively were the subject the teacher studied in school, years of teaching experience and teachers' highest qualification. Some factors which were relevant to the government schools were not relevant to the analysis of the private schools data and vice versa. For example, all the parents of private school pupils were literate except for one pupil's father and one pupil's mother. Also, whereas in the government schools, both teachers had qualification in Education and similar years of experience; in the private schools, only one teacher had a qualification in Education while the two others had Senior Secondary Certificates (SSCE). Finally, in the private schools, 1 teacher had 4 years' experience while the other two had 6-20 years' experience in teaching.

### ***5.3.1 Parent Literacy***

In the government schools, a comparison of the improvement of pupils based on parent literacy shows that on the average, pupils whose parents are literate scored more in three aspects than those whose parents are not, and those whose parents are not literate improved more in one aspect than those whose parents are literate.

Pupils whose mothers are literate scored higher in three of the tests as revealed by the mean ranks: Phoneme awareness (yes: 33.62; no: 25.41), Blending (yes: 33.35; no: 26.19), Burt (yes: 33.42; no: 25.97). However, when subjected to the Mann Whitney U test, none of the difference in scores was significant (Phoneme awareness  $p=0.11$ , Blending,  $p=.06$ ; Burt,  $p=0.11$ ). The Schonell spelling score reverses the pattern as the pupils whose mothers were not literate scored higher than their counterparts whose mothers were literate. (Mean rank – yes: 30.93; no: 33.13). The difference was not statistically significant.

Curiously, father literacy also followed the same pattern as mother literacy. Phoneme awareness (yes: 32.73; no: 28.24), Blending (yes: 32.94; no: 27.68), Burt (yes: 32.49; no: 28.88). Similarly, none of the difference in scores was significant (Phoneme awareness  $p=.38$ ; Blending  $p=.16$ ; Burt  $p=0.44$ ). The scores in Schonell spelling was equally a reverse of the pattern as the pupils whose fathers are not literate scored higher than their counterparts whose fathers are literate (mean rank – yes: 32.68; no: 31.06). The difference was however not statistically significant ( $p>.05$ ).

It would appear that parent literacy does not have any influence on the improvement of pupils taught using synthetic phonics. This is probably because even many literate parents do not assist their children in doing their homework. If literate parents assisted with their children's homework, the result may have been different.

### ***5.3.2 Attendance at private lesson and pupil's previous education***

More pupils attend private lessons than those who do not. Similarly, more pupils have had some schooling experience prior to enrolment in primary one. Some pupils started at pre-school, others had done primary one in the previous year and were repeating the class. Pupils who had private lessons had greater improvement than those who did not, in phoneme awareness, as shown by their mean ranks (yes: 32.46; no: 30.76). In the three other tests, pupils who did not attend private lessons had higher scores than those who did: Blending (yes: 31.22; no: 31.71); Burt (yes: 29.74; no: 32.86); Schonell (spelling yes: 30.93; no: 32.79). However, the differences in post-test mean rank scores were not significant as revealed by Mann Whitney U test (phoneme awareness  $p=0.71$ ; blending  $p=0.88$ ; Burt  $p=0.46$ ; Schonell spelling  $p=0.35$ ).

Also, the result of pupils in the government school sample by participation in previous education reveals that in all four tests, pupils who had previous education had higher mean rank scores than the group who did not have previous education. Phoneme awareness (yes: 33.02; no: 25.77 Blending (yes: 32.81; no: 26.58), Burt (yes: 32.07; no: 29.35), Schonell spelling (yes: 31.85; no: 30.19). Nevertheless, none of the differences in scores was statistically significant (Phoneme awareness  $p=0.05$ ; Blending  $p>0.05$ ; Burt  $p>0.05$ ; Schonell  $p>0.05$ ).

In the private schools, pupils who did not participate in private after school lessons had higher scores than those who did in 3 of the four tests. Phoneme awareness (yes: 18.38; no: 18.67  $p>0.05$ ), Burt (yes: 17.76; no: 19.53  $p>0.05$ ), Schonell (yes: 18.29; no: 18.80  $p>0.05$ ).

It was only in blending (yes: 18.64; no: 18.30  $p>0.05$ ) that the pupils who attended private lessons have higher mean rank scores than those who did not. In all cases, the p-values are greater than 0.05, the difference in mean rank scores is not statistically significantly different for any of the tests.

In the private schools, pupils' attendance at previous education did not influence their improvement level. In phoneme awareness, (yes: 18.35, no: 20.17  $p>0.05$ ). Blending (yes: 18.62; no: 17.17  $p>0.05$ ); Burt (yes: 18.50; no: 18.50  $p>0.05$ ); Schonell (yes: 18.58, no: 17.67  $p>0.05$ ). There was no significant difference in the difference in scores by attendance at private lessons either.

In both samples there was no significant difference in scores on the basis of attendance at private lessons or of previous education. The conclusion therefore is that attendance at private after school lessons and participation in pre-school education does not have any influence on the improvement of pupils taught using synthetic phonics.

### ***5.3.3 Availability of reading books at home***

This investigated if in the pupils' homes, they had books to read apart from school text books. In both government and private school samples, more pupils said they had other books at home apart from school textbooks. The results of synthetic phonics taught pupils in government schools based on availability of reading books other than school textbooks in the home shows that pupils who had reading books other than school textbooks in the home had higher scores than the others who do not in two of the tests as demonstrated by the mean ranks: Phoneme awareness (yes: 34.05; no: 27.46), Blending (yes: 31.79; no: 31.04) However, in the two other tests, pupils who had no reading books at home scored higher in Burt (yes:31.25; no: 31.90) and in Schonell (yes: 30.39; no:33.25). Again, these differences in post-test mean rank scores were not significant as shown by the Mann-Whitney U test (phoneme awareness  $p=.16$ ; blending  $p=.83$ ; Burt  $p=.88$ ; Schonell  $p=0.38$ ).

Just as in the government school sample, the influence of availability of reading books at home also appears to be high though not significant in the data for the private schools. In all tests, the mean rank was higher for the pupils who had reading books at home. Phoneme awareness (yes:19.95; no: 13.44  $p>0.05$ ), Blending (yes: 19.63, no:14.56  $p>0.05$ ), Burt (yes:20.14, no:12.75 $p>0.05$ ), Schonell spelling (yes:19.77, no:14.06  $p>0.05$ ).

Overall, the result from both samples suggests that availability of reading books in the home has no significant effect on pupils' improvement in reading skills when they are taught using the synthetic phonics method.

#### ***5.3.4 Reading to someone or being read to by someone at home***

Fewer pupils read to someone at home (27) than those who did not (35), also fewer pupils had someone who read to them at home (21) than those who did not (41).

		Someone reads to pupil at home					Pupil reads aloud to someone at home						
		N	Mean Rank	Sum of Ranks	U	Z	p	N	Mean Rank	Sum of Ranks	U	Z	p
Phoneme awareness	No	35	26.66	933				41	29.84	1223.50			
	Yes	27	37.78	1020				21	34.74	729.50			
	Total	62			303	-2.41	0.02	62			326.50	-1.01	0.31
Blending	No	35	28.10	983.50				41	30.68	1258.00			
	Yes	27	35.91	969.50				21	33.10	695.00			
	Total	62			353.50	-2.31	0.02	62			397	-0.68	0.50
Burt	No	35	30.30	1060.50				41	30.76	1261.00			
	Yes	27	33.06	892.50				21	32.95	692.00			
	Total	62			430.50	-0.66	0.51	62			400	-0.50	0.62
Schonell spelling	No	35	31.77	1112.00				41	32.37	1327.00			
	Yes	27	31.15	841.00				21	29.81	626.00			
	Total	62			463	-0.196	0.85	62			395	-0.77	0.44

**Table 5.47: Reading at home (Government school)**



Table 47 shows the performance of the pupils taught using the synthetic phonics method in all tests based on someone reading to the pupil at home or the pupil reading to someone at home. That 'someone' could be an adult or a more knowledgeable older sibling. Pupils who had someone read to them at home scored higher in three of the tests as can be seen in the mean ranks: Phoneme awareness (yes: 37.78; no: 26.66), Blending (yes: 35.91; no: 28.10), Burt (yes: 33.06; no: 30.30). When subjected to the Mann Whitney U test, the difference in scores was statistically significant for phoneme awareness  $p=0.02$  and blending  $p=.02$ . However, the difference in scores for Burt was not statistically significant (Burt  $p=0.51$ ). Likewise, pupils who read to someone at home scored higher in the same three tests as in the case of those who had someone read to them at home as shown by the mean ranks: Phoneme awareness (yes: 34.74; no: 29.84), Blending (yes: 33.10; no: 30.68), Burt (yes: 32.95; no: 30.76). However, when subjected to the Mann Whitney U test, the difference in scores was not significantly different (Phoneme awareness  $p=.31$ , Blending,  $p=.50$  Burt,  $p=.62$ ). In Schonell spelling, pupils who did not read aloud to someone at home had higher scores than those who did (mean rank- yes: 29.81; no: 32.37). The difference was likewise not significant ( $p=.44$ ).

The result implies that someone reading aloud to synthetic phonics taught pupils significantly influences their improvement in phoneme awareness and blending skills whereas the pupil reading to someone does not significantly influence improvement in any aspect of reading skill. However, it must be noted that of the 38 pupils who have reading books at home, only 21 read aloud to someone at home and 27 were read to at home. This shows that not all who had books at home read at home.

### ***5.3.5 Teacher's qualification and years of teaching experience***

In each school management type, equal numbers of pupils had teachers who had an English specialty and who did not.

In the government schools, the teachers had above ten years teaching experience but in the private schools, the teachers' years of experience varied.

Variable		N	Mean Rank	Sum of Ranks	U	Z	p
Phoneme awareness	No	31	38.90	1206.00			
	Yes	31	24.10	747.00			
	Total	62			251	-3.24	0.00
Blending	No	31	34.15	1058.50			
	Yes	31	28.85	894.50			
	Total	62			398.50	-1.58	0.12
Burt	No	31	33.02	1023.50			
	Yes	31	29.98	929.50			
	Total	62			433.50	-.73	0.46
Schonell spelling	No	31	32.87	1019.00			
	Yes	31	30.13	934.00			
	Total	62			438	-.87	0.34

**Table 5.48: Teacher has English qualification (Government schools)**

Table 48 illustrates the result of pupils in the four tests based on if the teacher had qualification in English. Teacher data collected illustrates that both teachers had the requisite qualification in Education but the teacher in one group studied English at school while the other did not. The result in the table shows the performance of pupils based on the subject the teacher studied at school. The result shows that pupils whose teacher did not study English when she was at school had higher scores in all the tests than did the pupils whose teacher studied English. (Phoneme awareness (yes: 24.10; no: 38.90), Blending (yes: 28.85; no: 34.15), Burt (yes: 29.98; no: 33.02) Schonell (yes: 30.13; no: 32.87). The difference in scores was significant for phoneme awareness  $p=.00$ ; though it was not significant in the other tests (blending  $p= .12$ ; Burt  $p=.46$ ; Schonell  $p=.34$ ). It is not surprising that having an English specialty did not set the teacher at an advantage.

		N	Mean Rank	Sum of Ranks	U	Z	p
Phoneme awareness	No	18	17.58	316.50			
	Yes	18	19.42	349.50			
	Total	36			145.50	-.52	.61
Blending	No	18	17.06	307.00			
	Yes	18	19.94	359.00			
	Total	36			136.00	-.83	.42
Burt	No	18	17.19	309.50			
	Yes	18	19.81	356.50			
	Total	36			138.50	-.75	.46
Schonell spelling	No	18	18.22	328.00			
	Yes	18	18.78	338.00			
	Total	36			157.00	-.16	.88

**Table 5.49: Teacher has English qualification (Private schools)**

Contrary to the situation in the government school sample, pupils whose teacher studied English have higher mean rank post-test scores than those whose teacher did not study English. However, the difference was not statistically significant ( $p > 0.05$ ) in any of the four tests.

Overall, the results suggest that improvement in reading when taught with the synthetic phonics method is not dependent on the teacher possessing an English qualification. As has been mentioned, the teacher preparation while studying did not include training on how to teach pupils to read, even when the teacher studied English. Therefore, a teacher who studied English was not necessarily in a better position to teach reading than the one who did not.

**Teacher's years of experience:** As mentioned earlier, the two teachers in the government schools had similar years of experience and as such, it was not possible to check if this factor had any effect on the pupils' improvement. On the contrary, the teachers in the private schools had differing years of experience.

Variable		N	Mean Rank	Sum of Ranks	U	Z	p
Phoneme awareness	1-5	11	17.45	192.00			
	6-10	25	18.96	474.00			
	Total	36			126.00	-.40	0.71
Blending	1-5	11	15.05	165.50			
	6-10	25	20.02	500.50			
	Total	36			99.50	-1.2	0.20
Burt	1-5	11	20.14	221.50			
	6-10	25	17.78	444.50			
	Total	36			119.50	-.62	0.54
Schonell spelling	1-5	11	22.14	243.50			
	6-10	25	16.90	422.50			
	Total	36			97.50	-1.42	0.17

**Table 5.50: Teachers' years of experience (Private schools)**

Results from the private schools sample shows that pupils whose teacher had lower years of experience had higher mean rank scores in Burt reading and Schonell spelling while those whose teachers had higher years of experience had higher mean rank scores in phoneme awareness and blending.

The above result suggests that teacher's years of experience does not have a significant effect on improvement of pupils taught with the synthetic phonics method. In phoneme awareness and blending, pupils who were taught by more experienced teachers had higher scores on the average than those taught by the less experienced teacher suggesting that experience may play a role but  $p > .05$  in each case. In Burt reading and Schonell spelling, the situation reversed completely and the pupils whose teacher had the least experience outperformed those whose teacher had more years of experience ( $p > .05$ ). As can be observed in the p-values, none of the differences was significant. This implies that a teacher's years of experience has no influence on the improvement of pupils taught with the synthetic phonics method. Pupils' improvement in reading will not be influenced by teachers' years of experience when they are taught with the synthetic phonics method.

#### 5.4 Pupil Attitude

What is the attitude of the pupils towards the use of synthetic phonics in the classrooms?

Answering some of the previous research questions resulted in revealing many aspects of the attitude of the pupils to synthetic phonics method. However, this section portrays

more closely, the attitude of pupils to synthetic phonics. Data for the section was gathered through classroom observations, teacher focus groups, and pupil interviews.

Recurring themes during classroom observation were pleasurable learning, participation, engagement and confidence. These themes were also explored by the pupil interview guide.

#### ***5.4.1 Pupil Interview***

Two of the eight pupils interviewed said they could read before they began learning with synthetic phonics method while six said they could not read at the start of the intervention. However, seven of the eight said they were able to read at the time of the interview, six months after the introduction of the synthetic phonics method.

On how useful they found the method, all pupils found the method useful for pronouncing words, reading, and spelling.

*"I use phonics to pronounce hard words."*

*"I sound difficult words and pronounce."*

*"It has helped me to read."*

*"It has helped me to learn spelling."*

*"It has improved my reading".*

*"I like it."*

*"It is good to learn sounds."*

The theme of fun and enjoyment was also shown by the pupils during the interviews. Every one of them said they enjoyed their lessons and mentioned different aspects that they enjoyed. Classroom observation data confirmed this as mentioned earlier. Pupils had occasion to play games, dance, fly like an aeroplane, etc.

There were several scenes of pupils expressing joy at correctly answering questions.



**Figure 5.66: Happy pupil**

Pupils engaged with the lessons in many different ways. They paid close attention while the teacher taught and were always eager to answer questions. In the Extract below, apart from the fact that pupils were all waving their hands in the air and hoping to be the one called, one of them whose seat was at the back found his way to the front in a second, so as to be more visible and be nominated to answer the teacher's question. The pupils' attention span did not seem to wane from the start of lesson till the end. The extract below took place about the middle of the lesson.

In CO Extract 28, the teacher asks a question. The pupil right at the back, rises off his seat #5.67, runs towards the front #4.68 and succeeds in making his way #4.69 right up to the front calling the teacher's attention as he goes.

**CO Extract 28**

**(S4P)**

- 1 Teacher: How many sounds in wind
- 2 Pupil: Aunty me, Aunty, me, me, me, me



**Figure 5.67 Pupil ran from the back**



**Figure 5. 68: Pupil runs towards the teacher**



**Figure 5.69: Pupil right in front**

During the teaching of the sounds, pupils enthusiastically participated in the actions as shown below.

**CO Extract 29**

**(S1G)**

Teacher: Give me the sound with the action

Pupils: #5.70 r::::::::::



**Figure 5.70: 'r' with action**

**CO Extract 30**

**(S2G)**

Teacher: What was the sound the aeroplane made?

Pupils: #5.71 'n' 'n' 'n'



**Figure 5.71 : 'n' with action**

**CO Extract 31**

**(S2G)**

Teacher: Class what sound is this?

Pupils: 'c'

Teacher: With action

Pupils: #5.72 doing the action



**Figure 5.72: Click your castanet**

They happily participated in actions and games as revealed by other scenes previously shown.

The pupils also gladly role-played as they worked in pairs one person playing the teacher and then they reversed roles and the other partner became the teacher.



**Figure 5.73: Partner work**



Of the eight pupils interviewed, seven of them wished to continue learning with synthetic phonics while one said he could read so no longer needed phonics.

From the foregoing, it could be said that the pupils enjoyed the synthetic phonics lessons, they had fun, they engaged with the content and participated actively in all the aspects of the lessons, and they found the method useful.

### **5.5 Teacher Attitude**

What is the attitude of teachers to synthetic phonics method?

The attitude of teachers is examined here through the Technology Acceptance Model (Venkateshet al 2003). This model proposes that the two determinants of acceptance of technology are Perceived Usefulness (PU) and Perceived Ease of Use (PEU). The section investigates the extent to which the teachers believe that the synthetic phonics method is useful towards successfully achieving their goal of teaching pupils to read. It also investigates the thoughts of the teachers concerning the ease with which the method enables them to achieve the goals.

Exploring the focus group discussion data revealed that the teachers welcomed the intervention primarily because they considered it is useful (Eshiet 2013b; Venkateshet al 2003) in improving their knowledge of how to teach basic reading and writing, ease of teaching, teaching with fun rather than with pain, and increased confidence in teaching English, increased interest, and effective teaching.

At the post training focus group discussion, teachers expressed gratitude for the training and said that the knowledge of synthetic phonics is a very useful one. They added that they did not know the sounds of English previous to the training and were of the opinion that the knowledge of sounds will make it make the teaching of English easier for them. One can deduce from this that teaching English was perceived as a difficult task prior to the training in synthetic phonics.

#### **FG Extract 10**

- 1 Participant 3: and to add to what she has said the sounds
- 2 were not properly taught in primary school. Before now,

3 some of us didn't know the names of these sounds, how to sound  
4 the words, but now we can easily teach it to the children

In addition, they expressed optimism that the new method would not only make teaching easier for them but will also make the teaching task an interesting one. They also felt more confident to teach the subject after the training. They thought the training was useful in that it would make the teacher interested in teaching the subject implying that teaching English was hitherto not an interesting task.

**FG Extract 11:**

1 Participant 4: Another gain is that it will make the  
2 teaching of the subject simple for the teacher to present  
3 the subject of English Language that some of our teachers  
4 cannot teach but from this method the teacher will have  
5 interest to teach that particular subject

The teachers also thought that the training was useful for making learning easier for the pupils. To the teachers, the synthetic phonics teaching strategy was a useful one because it would reduce their workload. In addition to teaching with greater ease they would have a class of willing pupils who would find learning easy and fun unlike when they used the traditional method. The opinion of one of the teachers was well applauded and given a nod by other teachers.

**FG Extract 12:**

1 Participant 2: Jolly Phonics is an interesting way of  
2 teaching. Jolly Phonics is an interesting method of  
3 teaching English because it is all funny,

4 Participant 4: it will be fun but now with the teaching  
5 of these sounds children can easily pronounce them well  
6 these words. It helps in elevating their study standard

The teachers had more to say concerning how easy the method will be for the pupils'

### **FG Extract 13**

1 have learnt the sounds, immediately the teacher would bring  
2 out a word like 'pot' they will know that the first sound  
3 there is 'p' and the other one which is 'o' then, 't' and  
4 they quickly write it out. Jolly Phonics helps a lot as we  
5 have all seen just read and write now immediately you finish  
6 saying it you write it. Those children will be able to read  
7 words easily and quickly

The teachers thought the stories and mnemonic actions are very useful for getting and retaining the pupils' attention and also as reminders of the sounds to the pupils.

### **FG Extract 14:**

1 Participant 4: Another thing there is that with the sounds  
2 and the action, the action also helps a lot because once the  
3 teacher is out there teaching sounds the pupils after  
4 mentioning the sound he comes up with the action and the  
5 child as soon as the teacher comes into the class and says  
6 what sound is this by mere coming out with the sound and the  
7 action has made learning interesting for the children,  
8 because as you come with the stories (.) uh and the  
9 demonstrations () they pick interest and learn. (.)

10 Participant 4: even with the stories as well (), even as she  
11 has said, (.) when they remember the stories they can easily  
12 identify the, the sounds, (.) and also pronounce words easily  
13 (.) without much stress.

In addition, the teachers found the synthetic phonics games and role play method useful because according to them, they were taught that there is a teaching method called the 'play-way' method but they did not know how to implement such a method. The synthetic phonics method is useful in showing them how to teach pupils using play.

### **FG Extract 15**

1 ... and the play way methods, the teacher is playing with the  
2 pupils they are also gaining a lot, even without using the

3 text books whatsoever he can teach because he is using the  
4 play way method in teaching and the children too also gain  
5 because they are playing with the sounds

In summary, teachers left the training thinking that the synthetic phonics method is a useful method which would produce great result in teaching pupils how to read. They therefore were enthusiastic to begin to teach pupils using the method. Using the terminology of the framework for this analysis, teachers expressed a behavioural intention to use the method (Venkateshet al 2003).

The actual use system, how the teachers actually implemented the intervention, is the focus of the next section. However, to complete the findings concerning teacher attitude, the post intervention focus group discussion offers data on the outcome of the use of the synthetic phonics method by the teacher. Therefore, following the next section, I will return to the teacher focus groups discussion to explore whether or not the teachers thought that the hopes they expressed at the beginning were realised after they had taught using the method for 6 months.

### **5.6 Teachers' mode of implementation (Actual Use system)**

To answer the question as to how the teachers implemented the synthetic phonics method involved looking back into the guidance the teachers were given and assess how well they followed the guidance. At the training, as mentioned in Chapter 3, the teachers were taught the principles of training using the acronym of the 5 Ps- Participation, Positive teaching, Pace, Purpose, and Passion.

#### ***5.6.1Participation***

Classroom observation data show evidence that the teachers used partner work and role plays to advantage. Pupils were seen playing the teacher in partners and exchanging roles. So Pupil A plays the teacher, asking the partner questions and pupil B takes over and pretends to be the teacher, asking pupil questions. In CO Extract 32, the pretend teacher holds the pencil and asks questions of the partner. It is a blending session and throughout the class, one can hear one pupil call out sounds and the other pupil blend the sounds.

**CO Extract 32**

**(S5P)**

Pupil A1: s-i-t

Pupil B1: sit

Pupil A1: p-i-t

Pupil B1: put, pat (not sure, #5.74 #5.75 looked out for the class teacher, she was far away, so they had their private discussion#5.76 and moved on)

Pupil A1: p-a-t

Pupil B1: pat

Pupil A1: n-i-p

Pupil B1: nip

Pupil A1: n-a-p

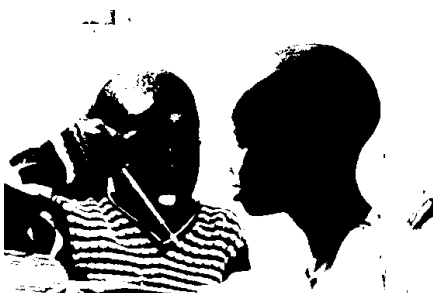
Pupil B1: nap



**Figure 5.74: 'I'm not sure of this'**



**Figure 5.75: 'We need you teacher'**



**Figure 5.76: 'Let's move on, we can't get the teacher'**

All seemed to be going well until the ‘teacher’ (holding the pencil) asked the ‘pupil’ in a stern voice if the sound the pupil gave corresponded with the sound the ‘teacher’ said. The pupil humbly replied that it did not.

**CO Extract 33**

**(S5P)**

Pupil A3: +(frowning)#5.77 Is this k (letter name)?

Pupil B3: #5.78 No



**Figure 5.77 : Is this ‘k’?**



**Figure 5.78: No, it’s not ‘k’**



**Figure 5.79: Displeased**

In further pursuing the goal of participatory learning environment, the teachers also used the actions and games to make the classes engaging for the pupils. The teachers indeed kept the pupils engaged every moment during the class sessions as even to the last minute.

In CO extract 34 below, the teacher announces that the word they will sound is the last for the day. Immediately she asks the question, pupils who had all been seated all sprang to their feet wanting to be the one to answer the question. No pupil remained seated as

they shouted as loud as possible to get the teachers attention. A satisfied teacher it was who declared that the pupils all wanted to ensure they answered a question before the lesson ended.

#### **CO Extract 34**

**(S4P)**

Teacher: #5.80 Everyone wants to make sure they answer



**Figure 5.80: Happy teacher**

Of particular interest is the fact that teachers were confident enough to encourage pupils to ask questions and to disagree with the teacher if they thought the teacher was wrong. In a teaching culture where teacher is always correct, this appeared to have been a landmark achievement. The classroom scene captured below is a typical example of pupils disagreeing with teachers and holding on to their own views.

#### **CO Extract 35**

**(S4P)**

- 1 Teacher: Now let's sound this one again, please sound it?
- 2 (writes 'w')
- 3 Pupils: 'w'
- 4 Teacher: Again?

- 5 Pupils: 'w'
- 6 Teacher: Writes 'e'
- 7 Pupils: 'e'
- 8 Teacher: Writes 'll'
- 9 Pupils: 'l'
- 10 Teacher: Ha ha, you say 'l', but me, I see two 'll'
- 11 Pupils: It's one
- 12 Teacher: You say it's one, me , I'm seeeing 2 and you're  
13 telling me it's one
- 14 Pupils: It's one.
- 15 Teacher: Ha, but I see two
- 16 Pupil: Two
- 17 Teacher: Yes, he's correct, I'm seeing two
- 18 Pupils: It's one

The pupils in the scene above were rewarded when the teacher told them that they were right. There were other instances when the pupils predicted teachers' next step and even when the teacher may not have intended to take such steps, they obliged the pupils. This they did to encourage the pupil's initiative. An example was when a teacher had taught the class to blend by writing the words on the board. When she did the last one, a pupil stretched her hand out for arm blending and the teacher took the hint and made the class to blend the five words on their arms even though they already blended them on the board. In another instance, a pupil suggested they played the 'thumbs up' and 'thumbs down' game by the way he answered the teacher's question. The teacher took the cue, and did the sounding lesson using this game.

Another way teachers made the class engaging was calling on specific pupils to confirm what other pupils said and allowing pupils to write on the board. This gave room for much beneficial movement in the class and reduced the amount of time pupils spent on one



spot. The teachers were often careful to ensure all pupils participated. When they suspected a pupil was lost to the class, teachers called the attention of such a pupil by calling their names, giving them tasks to perform, moving closer to the pupil, etc. Some of these acts of the teachers have been detailed in previous extracts. These showed teachers implementing the intervention in participatory classrooms where pupils felt free to contribute to their own learning.

### ***5.6.2 Positive teaching***

The teachers in the synthetic phonics study expressed confidence and passed this on to the pupils. Right from the post-training focus group discussion, teachers said they had gained much knowledge which made them more confident to teach English to their pupils.

Classroom observation showed that the teachers delivered the teaching with great confidence and in an environment free of threat and intimidation. Teachers did not shout at pupils but rather created a nurturing environment where pupils sat and listened to the teacher with rapt attention. Teachers did not nag nor need to flog pupils during the synthetic phonics classes. When pupils made mistakes or gave the wrong answers, they were corrected or redirected in such a way that those same pupils were soon eager to answer questions again. In the following extract, a pupil raises her hand to answer a question, the teacher allows her a turn but she does not provide the correct answer. The pupil is not embarrassed or discouraged. When the teacher asks the very next question, the pupil who just failed at an attempt to answer is up again raising her hand to answer.

#### **CO Extract 36**

**(S3P)**

- 1 Teacher: B (name of pupil)
- 2 Pupil 1: #5.81 b-a-k
- 3 Teacher: *No, no* I say <sup>↑</sup>bang. What sound did you learn
- 4 today, what sound?
- 5 Pupil 1: #5.82 Aunty, Aunty



**Figure 5.81: Wrong answer**



**Figure 5.82: Pupil eager to answer again**

Teachers indeed played ‘catch the children doing well’ instead of looking out for what they did wrong. Teachers looked for every opportunity to praise the pupils. Praise came in form of smiles, affirmation in form of nod, teacher repeating pupils' correct answers, claps, telling the pupils to pat themselves on the back. In a particular class, the teacher said ‘very good’ eight times in ten minutes. In another class, the teacher’s favourites were ‘beautiful children’, and ‘good children’.



**Figure 5.83: A pat on your back**

### ***5.6.3 Purpose***

In all the lessons observed, teachers showed clarity of purpose at every stage of the lesson and communicated such purpose to the pupils. Lessons were focused and for each aspect of the lesson, the teacher signposted using words like ‘it is time for revision’; let us move to the business of the day; ‘we are now going to do blending’; ‘I am going to write some words on the board, you will count the sound and tell me how many there are’; ‘our new sound for the day is...’; ‘story, story?’ (Signalling that the teacher was about to tell the sound story). Because the teachers made the purpose clear to the pupils, the pupil talk, though plenty, was not disorderly. It was always focused on the aspect of the teaching being done. This enabled the teachers to cover much ground during each lesson. I even

marvelled at how much learning took place in one lesson period. Examples can be seen in the following extracts.

The class has just finished the blending exercise. Teacher concludes that session by telling the class to give themselves a long clap. She then signals that it is time to move on to another aspect of the lesson.

### **CO Extract 37**

**(S1G)**

- 1 Teacher Give yourselves *one clap, another clap, and four*
- 2 *claps*
- 3 Pupils: Did the clapping in the prescribed style
- 4 Teacher: (....) Are we together?
- 5 Pupils: Yes
- 6 Teacher: We're together?
- 7 Pupils: Yes
- 8 Teacher: You're going to tell me how many sounds you hear

### **5.6.4 Pace**

It was amazing how quickly teachers learnt what pace was good for their different classes. It was also interesting that they did not maintain a stereotyped kind of pace but adjusted to suit the understanding of the pupils. For example, when they started, they each spent much time on story and action but as the pupils adjusted to learning using sounds, teachers all began to spend less time on storytelling. They would often tell the story in one sentence and move on to blending and sounding. Also, when they started teaching the diagraphs, they spent much time on sounding to ensure that the pupils knew that the diagraph is one sound. Once the pupils got the point, they did not stop long at diagraphs when doing sounding. If in the course of blending or sounding a teacher noticed that pupils were struggling with the sound, they returned to teaching the sound. A classic example was a class where the pupils sounded 'web'. The teacher noticed that some pupils said 'd' for the 'b' sound. 'd' had been taught much earlier than 'b' but pupils

typically became confused when they were taught 'b'. Many lessons later, the teacher paused to explain the difference between the 2 sounds.

### CO Extract 38

#### (S4P)

- 1 Teacher: Writes 'w'
- 2 Pupils: 'w'
- 3 Teacher: writes 'e'
- 4 Pupils: 'e'
- 5 Teacher: writes #5.84 'b'
- 6 Pupils: 'b' (some 'd')
- 7 Teacher: Again? Again? Again?
- 8 Pupils: 'b', d'
- 9 Teacher: When it is facing this side #5.85 (pointing to her
- 10 left), it says 'd', when it is facing this side #5.86 (pointing
- 11 to her right), it says 'b'



Figure 5.84: Teacher writes 'web'



Figure 5.85: it says 'd'

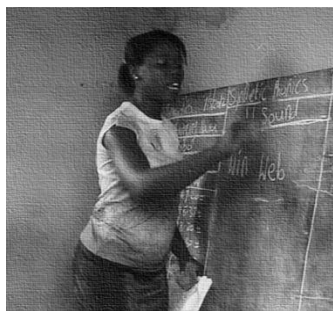


Figure 5.86: It says 'b'

The teacher made them sound the word 'web' again and again until she was sure that all said 'b' at the end of the word.

Also, in the same class, the teacher notices that many pupils do not sound the 'n' in 'went' such that the word sounded like 'w-et', 'wet'. She makes them sound it again and again. Some correct themselves and sounded 'w-ent' but many still say 'w-et'. She tells them there is a missing sound and makes them sound the word again. This time, they all sounded the 'n'

### CO Extract 39

#### (S4P)

Teacher: (Writes 'w-ent' on the board) Give me this sound ('w') #5.87 very loud and drag these ones together, from here, #5.88

pointing at 'e':: together

Pupils: w-et

Teacher: ↑ Again?

Pupils: w-et, (a few) w-ent

Teacher: ↑ I can't hear you

Pupils: w<sup>↑</sup>et

Teacher: But I'm not hearing this 'n', I can't hear it

Pupils: w-ent



**Figure 5.87: Give me 'w' very loud**



**Figure 5.88: Give me the 3 sounds together**

Midway through a class in another school, the teacher notices that pupils do not get the 'ng' sound very well. They appeared to have got it when she taught them earlier in the lesson. They had blended with the sound. But at sounding time, the pupils do not pronounce the sound correctly. The teacher stops a bit and teaches them the sound again.

**CO Extract 40**

**(S3P)**

- 1 Teacher: You're not getting the 'ng', I want you to say it
- 2 louder. All say 'ng'

- 3 Pupils: 'ng'
- 4 Teacher: Now let's say the second word
- 5 Pupils: k-i-ng
- 6 Teacher: Now, take it one and drag the two together
- 7 Pupils: k-ing
- 8 Teacher: will give us what?
- 9 Pupils: king
- 10 Teacher: will give us what?
- 11 Pupils: king
- 12 Teacher: let's go to the next word

Also, teachers paid attention to individual pupils when they noticed such pupils and gave extended turns to struggling pupils while being careful to return to the others quickly enough.

In CO Extract 41, the teacher gave a turn to a pupil who had not answered a question since the class began. The pupil got the first part correct but struggled with the second part of the sounding. Other pupils were eager to take the turn but the teacher gave the pupil a little more time before giving the turn to another pupil.

#### **CO Extract 41**

**(S3P)**

- 1 Teacher: How many sounds are you hearing in 'bang', 'bang',  
2 I want someone that will speak loud (moves to the front left).  
3 U, now give me the answer
- 4 Pupil: #5.89 Three (inaudible to others)
- 5 Pupils: Aunty, aunty #5.90 (moves to sit down)
- 6 Teacher: (To other pupils) Hold on, hold on. (To U) sound

7 Pupil: #5.91 Stands up again, attempts but did not get the  
8 answer

9 Teacher: (hm, hm) #5.92 moves to another pupil



**Figure 5.89: Inaudible**



**Figure 5.90: Pupil makes to sit down**



**Figure 5.91: Pupils stands up again**



**Figure 5.92: Teacher moves on to another pupil**

### ***5.6.5 Passion***

The teachers were passionate about the new method from start and because they saw quick results, it was easy for them to maintain a passionate attitude. They told the story with great enthusiasm and were able to pass similar enthusiasm to the pupils.

Although the method they used previously did not leave much room for the pupils to contribute or ask questions during lessons, when the teacher told the sound story for 'n', a pupil asked the teacher why the fisherman dropped his net. This showed how actively the pupils participated even in the story telling. Teachers had cause to move round the class, fly like an aeroplane, be the strongman lifting weights, rub their tummy in



enjoyment of a delicious meal and click their fingers and dance to the music of the castanet. Teachers did all these with great passion.

At the start of the intervention, teacher put a lot of energy into the story times and this usually dictated the tone for the day's lesson. In CO Extract 42, the teachers tell the story in a captivating way that the pupils listen with rapt attention as to the best story ever.

#### **CO Extract 42**

**(S2G)**

1 Teacher: Story story?

2 Pupils: Story

3 Teacher: Everyone sit down and fold your arms, (it's  
4 important) Once upon a time?

5 Pupils: #5.93 (Fold arms across chests) Time, time

6 Teacher: There was a boy, his name is Nicholas, his name is  
7 what?

8 Pupils: NICHOLAS

9 Teacher: Nicholas went to the river with his grandfather to  
10 catch fish. How many of you know how to catch fish? They went  
11 with something called:::

12 Pupils: net

Teacher continues the story till it is time to show the action



**Figure 5.93: Pupils listening attentively to a story**

In CO Extract 43, revision time is time to remember the sounds as well as the actions. The teacher shows the pupils the flashcards and pupils say the sound and follow by saying the sound accompanied with the action. The instruction from the teacher is sound first, and then, sound and action.

### **CO Extract 43**

**(S1G)**

Teacher: What sound is this?

Pupils: 'r'

Teacher: Say it with the action

Pupils: 'r' with action #5.94 teacher joins in the action



**Figure 5.94: Teacher joins in doing the action**

The lively manner in which the teaching was delivered is further exemplified in CO Extract 44, teacher tells the pupils to sound and blend 'long'. She demonstrated length by stretching her arms out. She did this because the next word may sound similar to the pupils. Everything went well but when it was time to sound 'lung' many of them sounded it as 'l-ong'. The teacher emphasises the sound 'u' and makes them repeat the word. She invested much energy, showing passion and the pupils reciprocated in kind.

### **CO Extract 44**

**(S3P)**

Teacher: Let's take the next word, l-ong

Pupils: l-ong, long

Teacher: Again? #5.95 demonstrating length with her arms

Pupils: long

Teacher: #5.96 l-<sup>↑</sup>ung

Pupils: l-ong, long

Teacher: Everyone say 'lung, lung'

Pupils: #5.97 l- ung, <sup>↑</sup>lung



Figure 5.95: Teacher demonstrates length as meant by the word 'long'



Figure 5.96: Teacher l<sup>↑</sup>ung



Figure 5.97: (Pupil) l<sup>↑</sup>ung

The teachers used the '5Ps' (Dixon, 2009) principle to great advantage in their classrooms. The 5 Ps are Participation, Partner work, Purpose, Passion, and Praise. All the teachers ensured that the pupils participated, they were engaged; they also engaged the pupils in partner work and often made them role play the teacher with others in partners. They taught with purpose as each day's work was well laid out and the teachers followed the

scheme. The teachers showed passion about the method; passion that appeared unpretentious and contagious to the pupils; and they often praised the efforts of the pupils.

### **5.7 Differences in teachers' mode of implementation**

Exploring how the teachers implemented the method brought to attention the need to check if there were differences in the mode of implementation by different teachers and if such differences had any influence on pupil achievement.

The teachers showed slight variations in the way they implemented the method. As indicated in the scheme of work, all lessons began with revising all sounds so far learnt by the pupils. Three of the teachers used flash cards while revising the sounds while the other two preferred to have the sounds already taught on the board and point to them one by one. They had pupils chorus the sound as the teacher pointed.

Revision was followed by the new sound of the day accompanied by story and action. All teachers used the stories but varied the amount of time spent telling the stories. In most cases, they spent longer on the story when they just started implementing the method. At that point, all the teachers felt most comfortable with the story aspect. However, as they began to understand and develop confidence with the blending and counting aspects, they gradually reduced the amount of time spent on storytelling so as to make more time available for the other aspects of the lessons. However, teachers continued to build in as much comprehension and as many vocabulary items as possible into the story times.

Learning the sound was followed by blending- combining the sound of the day with previously learnt sounds. Blending was done using the arms, from sounds written on the blackboard, words in the workbook, etc. The favourite for all the teachers appeared to be where the pupils say the first sound very loud, and pull the remaining three or four sounds together.

Sounding was done under three different categories. The first was to establish the presence or otherwise of a sound in a list of four words read out to the students. The words were also in the workbook. These words were not necessarily decodable as they were only meant for auditory training. The game used for this was the 'thumb up' and 'thumb down'. If the word called out had sound of the day, pupils thumb up, if not, they

thumb down and cross the word in their workbook. However, it was found that some teachers attempted to blend the words with the children. Classroom observation feedback brought quick intervention and teachers reverted to using the words as intended.

The second aspect of sounding was saying how many sounds there were in the word dictated. These would usually be decodable words. The third aspect was counting the sounds on the fingers and usually ended with blending the sounds into a word.

The slight variations in individual teacher's mode of implementation did not appear to have influenced the pupils' performance as the pupils in all schools showed evidence of learning and engagement.

### **5.8 Making room for comprehension**

One criticism of the synthetic phonics method is that it does not lead to comprehension but rather teaches pupils to call words without understanding. Bearing this in mind, teachers were specifically trained to include as much vocabulary building and comprehension as possible during the story telling period. I delved in the classroom observations to see if this was so in this study. In line with their training, teachers used the story telling opportunity to build comprehension and extend pupils' vocabulary. In CO Extract 45, the teacher checks understanding and also strengthens pupils' vocabulary.

#### **CO Extract 45**

##### **(S2G)**

- 1 Teacher: Story story?
- 2 Pupils: Story
- 3 Teacher: £ (smiling) everyone, sit down and fold your arms,  
4 sit down, sit down£ (it's important) Once upon a time?
- 5 Pupils: Time, time
- 6 Teacher: There was a boy, his name is (.) Nicholas, his name  
7 is what?
- 8 Pupils: NICHOLAS

9 Teacher: Nicholas went to the river with his grandfather  
10 went into the river to catch fish. How many of you know how  
11 to catch fish?

12 Pupils: Raised their hands

13 Teacher: They went with something called:::

14 Pupils: net

The teacher pauses here to check understanding and continues by commending the pupils and making reference to their physical location. She also builds on the knowledge that many of the pupils were children of fishermen or have some fishermen neighbours.

1 Teacher: The name is what?

2 Pupils: Net

3 Teacher: Haa, you're beautiful children, that shows that  
4 you're living in a riverine area. You know what they usually  
5 use to catch fish, [isn't it?]

6 Pupils: [NET]

7 Teacher: So they got into the sea, and they had already  
8 gathered some fish into the what?

9 Pupils: Net

10 Teacher: So, all of a sudden, they heard a noise, #5.98 they  
11 heard a what?

12 Pupils: Noise.

13 Teacher: A terrible noise, making 'n', 'n', 'n



**Figure 5.98: They heard what?**



**Figure 5.99: Do you know what this is?**

Teacher creates some suspense here by asking the pupils if they know what the noise was. Some say they do, others said they do not. She checks if they actually know and it turns out that they all said they do not. She then tells them what the source of the noise is in a soft tone as if revealing the greatest secret ever to them.

- 1 Teacher: #5.99 Do you know what it is?
- 2 Pupils: Yes
- 3 Teacher: You know what it is?
- 4 Pupils: No
- 5 Teacher: Now let me tell you. It's an aeroplane. And what?
- 6 Pupils: An aeroplane
- 7 Teacher: (Demonstrating the movement of the aircraft) It
- 8 was doing 'n''n''n' (mispronounced the sound). He said ha,
- 9 what is this? He held his ear (demonstrating holding of
- 10 ears). He left his net and ran away (demonstrating running).
- 11 He left the net with the fish and everything.
- 12 Pupil: (Why did he run away?)
- 13 Teacher: Because of the terrible noise.
- 14 Teacher ensured she ended the story with the sound before
- 15 writing the sound on the board.

- 16 Teacher: Because of the terrible noise it was making  
17 'n', 'n', 'n'. Now everybody do the sound for me
- 18 Pupils: 'n' 'n' 'n'
- 19 Teacher: Writes 'n' on the board

The above extract is typical of the story telling aspect of the lesson which usually takes the first three minutes of the lesson. The teacher stopped many times to check comprehension and also demonstrated some of the words. Similar demonstrations were mentioned in scenes discussed earlier where the teacher demonstrated 'wing' and 'long'.

### **5.9 The Other classroom**

While pupils in the synthetic phonics classroom learnt with this engaging and participatory pedagogy, the pupils in the control schools continued their learning in the usual way. An example of a lesson observed follows:

#### **General lesson structure**

In the same manner as in the synthetic phonics classroom, registration of pupils is taken before the first subject for the day is taught and that takes care of the day's registration. The date is written at the corner of the board and the topic for the lesson. Sometimes the board is shared into portions for writing other subject lesson.

Lessons also start with revision of previous lesson using questions like 'what did we do yesterday?' Children raise hands to respond and teacher calls them individually to answer while others applaud the pupil if correct.

Teacher explains the lesson for the day which is already fully written on the board while pupils listen quietly. The statement 'read after me' is used often during the lesson characterising the rote learning pedagogy.

At the end of the teaching session, pupils are told to complete an activity in their workbooks. Most pupils do not have the workbook so they write into their notebooks. Below is an example



### **Topic: Identification of objects (using the article “an”)**

The objective of the lesson was to teach how to use the article ‘an’ in identifying object that begin with a vowel. Objects were drawn on the board with the names written under each picture.

The teacher reads the word below each picture and asks pupils to spell the words. This is done several times and then individual pupils are called to touch one picture and spell while others chorused. Pupils who have copies of the workbooks are given their workbooks to do the day’s activities. The teacher explains how the activity should be completed. She moves round to inspect their work<sup>8</sup>. When the activity is completed, she collects the workbooks from the pupils who participated in the class activity and gives notebooks to all the pupils to copy from the lesson written on the board.

This was in contrast to the synthetic phonics classroom where teachers moved round the class, did actions and told stories and demonstrated actions that words represent in order to build the comprehension skills of pupils. Pupils in the traditional classroom were passive and the teacher did most of the talking. Spelling was by continuous drill and pupils rarely moved from their seated position.

### **5.10 What the teachers say about the synthetic phonics method**

As earlier mentioned, an analysis of the attitude of teachers would be incomplete without investigating what they thought about the intervention they had just been involved in carrying out. As a result, this section presents the teachers’ opinion on the influence of the intervention.

According to the teachers, pupils who had initial difficulty in identifying and in spelling words experienced improved skills in sounds and letter recognition as well as word identification. At the post intervention focus group discussion, the teachers explained that synthetic phonics helps to improve pupils’ spelling and writing ability, including their handwriting.

---

<sup>8</sup> The only time the teacher moves from the front of the class where she had stood to deliver the lesson.

**FG Extract 16:**

1 facilitates reading and writing (.) especially for those  
2 children that cannot be able to write so you see constant  
3 writing, you know when you give them the sounds, you give  
4 them the written aspect of it as well. So it helps the  
5 children actually to read and write, also in hand writing  
6 like aspect.

The teachers further mentioned that the synthetic phonics method promotes students' active involvement in the teaching and learning process. It also has a positive impact on the quality of instruction pupils receive in English language classroom because it enhances independent learning by the children. This is the point made by Participant 1 in the extract below and participant 2 immediately agreed

**FG Extract 17**

1 Participant 1: method before a child will need a teacher to  
2 tell him or her what words is written, but now, with phonics  
3 the child can pronounce the word by his/herself.

4 Participant 2: yes they can now quote the word properly by  
5 the time you pronounce the word (.) through the sound you  
6 make they are able to tell you what actually that word is.

They also said that the method was useful for building self confidence in the pupils. The classroom observation evidence earlier explored showed pupils arguing with the teacher about how many sound there are in 'well' and pupils insisting until the teacher agreed with them. Also, there were instances when pupils asked teachers why a particular situation occurred. These pupils usually did not question what the teacher said but they had gained confidence from the knowledge they had and from the acts of the teachers in making the pupils active participants as they learnt. They were able to pronounce new words on their own and did not need the teacher to teach them every new word. They had thus become co-constructors of knowledge and co-owners of the new methodology with the teacher.

### **FG Extract 18**

Participant 1: I will say it has built a kind of self confidence in them because they can see the words, and pronounce on their own, (.) it has also helped, I will say their speech, because the way they pronounce words before and now are two different things all together

The teachers said again and again that the adoption and the integration of synthetic phonics in the teaching and learning of English language enhanced learners' academic performance. They were certain that teaching with synthetic phonics will contribute immensely towards improving the quality of education not only in English but in other subjects as succinctly expressed by one of the teachers; highlighted in the extract below.

### **FG Extract 19**

Participant 2: that's what I said the last time, like what I said the last time, the performance of children now in language through this phonics has been very much better, far much better than before, .... ?even other aspects, I think language has covered even other subjects

One of the points raised by the teachers at the post intervention discussion was that the use of synthetic phonics provided a lively learning environment for the students and the teachers. The teachers explained that when the students were exposed to an enabling learning environment through the synthetic phonics method, learning became fun and entertaining not only to the students but the teachers as well.

Teachers at the pre-intervention focus group said they were more confident to teach English because during the 3-day training, they felt they had learnt how to properly teach the subject. As a result of their enhanced ability to teach the subject English, the teachers claimed that with the use of synthetic phonics, pupils' ability to recognise sounds and read words tremendously improved. Classroom observation showed teachers confidently teaching different aspects of reading skills to pupils.

## **FG Extract 20**

Participant 2: it makes my teaching to be effective

At the start, the teachers perceived the synthetic phonics as a useful and interesting method of teaching in the classroom. The teachers' positive disposition regarding their interest in the synthetic phonics was also reflected in their opinions during the post-intervention focus group. They restated opinions about training others during the post intervention focus group wishing that the method could be included in the curriculum for all schools. Stating that synthetic phonics teaching should start from the nursery school section, they also said it should extend into the higher classes as seen in the extract below.

## **FG Extract 21:**

Participant 2: I think I should said, say that we should include it in our curriculum, because it will actually help the schools, (.) especially in language art. (.)

Participant 1: I suggest if we can start from the nursery, you know government schools, they have nursery and primary, by the time they start from there and move to primary one it will be a kind of revision and building up on the foundation that has already been laid. Enhh ennhn, secondly I will say you people should not only stop in primary one. You can also go a bit further to primary two, it will help.

The comments of the teachers likewise revealed that they believe that the use of synthetic phonics is important in the development of learners' reading skills within their context of teaching English as a second language. In other words, most of the teachers acknowledged the pedagogical effectiveness of the synthetic phonics. They said they enjoyed several benefits as they taught using synthetic phonics and to them, an included benefit was that synthetic phonics is a vibrant tool for developing even teachers' pronunciation skill. The knowledge of synthetic phonics, according to the teachers, is so enriching that other teachers desire it and even consult the trained

### **FG Extract 22**

Participant 3: For me oh the benefit I benefited it helps me to pronounce words before, there are some words I could not pronounce before, but with this sounds I can pronounce them.

Participant 4: it makes my teaching to be effective, it facilitates ehmmn, it (.) because other teacher, teachers come to you and ask one or two things

The teachers also acknowledged that they learnt more as they taught the pupils. This was evident during classroom observation. The longer the teachers used the method, the more knowledgeable they became and the more confident they were in using the method.

### **FG Extract 23**

You know, and as you teach you also learn and acquire more knowledge and experience.

The teachers stated that the adoption of the synthetic phonics in their classrooms has enhanced the teaching of English and the development of learners reading skills.

They unequivocally stated that the method should be taught to all teachers from Pre-school to Primary 2, and even desire that the method be a part of the national curriculum.

### **FG Extract 24**

1 Participant 1: recommendable..... highly.... Nation, national, it  
2 is highly recommendable.

3 Participant 3: It is highly recommendable.

4 Participant 2: I think I should said, say that we should include  
5 it in our curriculum, because it will actually help the public  
6 schools, (.) especially in language art. (.)

7 Participant 1: Even the private schools they'll need it.

8 Participant 1: I suggest if we can start from the nursery, you  
9 know government schools, they have nursery and primary, by the  
10 time they start from there and move to primary one it will be a  
11 kind of revision and building up on the foundation that has  
12 already been laid. Enhh ennnhn, secondly I will say you people  
13 should not only stop in primary one. You can also go a bit  
14 further to primary two, it will help.

The teachers suggested that synthetic phonics should be introduced from the reception classes and should be used up to Primary Four.

### **5.11 Attitude to Classroom observation**

Teachers were positive to classroom observation and looked forward to it as a time to be mentored and to get feedback. Teachers speaking about the observation session during the focus group discussion said they felt comfortable being observed and did not feel under pressure to perform. This could be because they all felt at home with the method and enjoyed the teaching as much as did the pupils. There were times when it was necessary to give feedback to teachers and correct mispronounced sounds. Such opportunities were used to bring the correction in a mentoring way in the hope that the teacher also adopts such attitude when relating with the pupils. Usually, feedback was given after the class but if the mistake was such as could ruin the lesson, I sought opportunity to correct it without embarrassing the teacher and at a time when pupils were engrossed in other activities and would not know what went on between me and the teacher. During the post-intervention focus group discussions, the teachers affirmed that they benefitted from such mentoring.

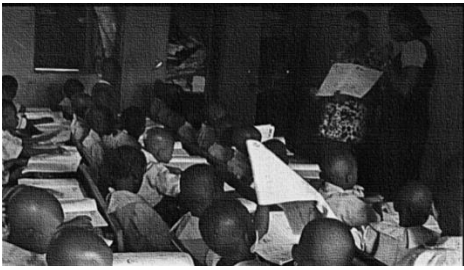
In the CO Extract 46 below, the teacher begins the lesson in a very strange way. She tells the pupils to sit straight and fold their arms and then she says the sound for the day in an inaudible tone, brings out the flash card and asks the pupils what letter it is. The pupils respond by telling her the letter name. She asks them if the letter is in upper or lower case, some pupils say upper, some say lower. By this time, pupils and teachers are confused alike. The teacher scolds two pupils and then asks the pupils to open to the page where the sound is in their workbook. During this time, while pupils rumble through their workbooks, the

researcher goes to the teacher and whispers the sound to her. Teacher recollects herself, tells the pupils the correct pronunciation and follows it with the story and action which she remembers very well. It turns out to be a brilliant class session.

#### **CO Extract 46**

#### **(S1G)**

- 1 Teacher: Now, we want to go into today's business. Our new
- 2 sound for to::day. All sit, sit straight, fold your hands. Our
- 3 new sound for today is ~ . This is the sound. Can somebody tell
- 4 me what letter is this?
  
- 5 Pupils: Letter g: (letter name)
  
- 6 Teacher: Letter:: 'gee', alright. Is it upper case or lower
- 7 capital letter or small letter?
  
- 8 Pupils: Capital
  
- 9 Teacher: IS IT CAPITAL 'GEE' OR SMALL 'GEE'
  
- 10 Pupils: Small 'gee'
  
- 11 Teacher: To form this sound, #5.100 researcher whispers to
- 12 teacher)
  
- 13 Teacher: (Raises flashcard This sound is:: 'g'g')
  
- 14 Pupils: 'g'
  
- 15 Teacher: Alright, that is the:: sound



**Figure 5.100: Researcher whispers to the teacher**

The above extract lends support to the teachers' comments at the focus group discussion concerning the researcher's visits to their classrooms.

The role played by the positive attitude of the teachers to the synthetic phonics method cannot be underestimated. The teachers' showed interest in the new method right from during the training and by the time they left the training, they were keen to use the method in teaching their pupils. They sustained this interest all through the period of the intervention. The classroom observation data and the focus group discussion data confirmed each other in showing that the teachers had a good attitude to the synthetic phonics method. They successfully set aside the rote learning method and made the class engaging and interesting for the pupils. Such an attitude promoted the intervention which resulted in the improved post-test performances of the pupils in both school management types above their counterparts in the control groups in phoneme awareness and word blending.

## **5.12 Conclusion**

This chapter started off by examining the findings of the study regarding the influence of gender on the improvement of reading skills of the pupils taught with the synthetic phonics method. Concluding that gender played no role in improvement, the chapter further examined the influence of home factors of parent literacy, availability of reading books at home and assistance for reading at home. None of these was found to have significant influence on reading improvement. Teacher factors of subject specialty and years of experience were also found to have no significant effect on the improvement of reading of pupils taught with synthetic phonics. In addition, the chapter explored the attitude of pupils and teachers to the introduction of synthetic phonics teaching method and also investigated the manner in which the teachers implemented the intervention.



Chapter 6 focuses on the implications of these findings for the pupils, teachers, parents, policy makers, and to the country Nigeria.

## **Chapter 6. Discussion**

### **6.1 Introduction**

Chapter five illustrated the findings obtained in the study. This chapter discusses the findings and their significance in relation to the literature in the field and to the existing standards and policy. It reviews the influence of synthetic phonics; participatory classrooms, peer work and role play on the teachers' theory and on the pupils' learning. The chapter also explains the implications of the findings for teachers, pupils, and the society. Besides, it summarises the influence of the research on the researcher.

### **6.2 The synthetic phonics teaching method and improved reading skills**

The findings of the study uphold the sociocultural theory which posits that human development is best viewed in the social context and that learning occurs in the context of interaction with other members of the community of knowledge and with the aid of relevant tools (Vygotsky 1979). The community members could be adults and they could be children just as in any natural human community, and in this case; the teachers *and* pupils. Pupils (like apprentices) who started by imitating the expert (teacher) (Lantolf, 2000), gradually began to apply the knowledge gained from the expert to create their own ideas through the acquisition of cultural tools. The cultural tools included signs and symbols represented by written and spoken sounds and words; and the act of blending and decoding the sounds and words (Lantolf, 2008). The teacher modelled speaking, reading and writing the signs and guided the pupils not only to copy the adult but also to transform and extend what the adult models to them through the process of imitation (Lantolf, 2000). The pupils in the study journeyed through three of the four stages of knowledge acquisition (Vygotsky 1994) and the teachers and researcher witnessed external knowledge provided by the teacher become internalised (Vygotsky, 1994) in the pupils. The signs and symbols were aided by stories, actions, games, and role play all designed to aid memory development of the pupils (Vygotsky, 1994). Beginning with the memorisation stage, a new phenomenon was introduced to the pupils in the form of spoken and written sounds. The teaching of the sounds was accompanied by stories and mnemonic actions which are packaged with suspense, fun and adventure. The prop offered by the story telling and actions assisted the pupils through the memorisation stage in such a way that pupils were hardly aware that they were memorising. These tools,

coupled with constant repetition of the sounds all through each lesson period acted as stimuli which commanded the pupils' response to the learning and sustained them throughout the lower mental level stage (Bodrova and Leong, 2006). At this level, the teacher's instruction played a key role. The pupils depended mostly on the teacher to tell them how to pronounce the sounds, how to blend, to identify the sounds in words, know the position of sounds in words, and know the number of sounds in a word. They also depended on the teacher to teach them how to write the sounds. Since learning at the lower mental level relies greatly on external factors e.g. teacher's instruction, the teacher deliberately and repeatedly exposed the pupils to the learning of the different aspects of reading skills. The act of repeating, the fun and enjoyable games all served to reduce the tenseness which pupils usually experienced when taught with the traditional rote learning method. Thus, even while at the lower mental level, learning with synthetic phonics was eagerly received by the children.

When the teacher had introduced the pupils to the different aspects of reading skills, they encouraged shared knowledge between the pupils and their peers and also between pupils and teachers. Thus the teachers guided the pupils towards their next developmental zone, the intersubjective stage of learning. The pupils became better learners because they were given room to interact with the teachers and their peers in the classroom. They had the opportunity to think and to express their thoughts thereby contributing to their own learning. They were transformed from being only seen and not heard to pupils who answered questions boldly, asked questions of teachers, and challenged teachers' position. This happened because they were accepted as members of the learning community who were not mere *tabula rasa* (Tharp and Gallimore 1988) but who had some knowledge which could be shared and built on. At this stage, the pupil, the teacher, and the peers shared knowledge among one another. Pupils discovered with the cooperation of the teacher that knowledge does not belong to only the teacher (Zuckerman, 2003) but that they also had somewhat to contribute to the learning. Thus the pupils could argue with the teacher that there are fewer sounds in the word 'well' than the teacher suggested. Pupils could imagine that the teacher might even be wrong!

At this stage, children are not only given relevant support/tools to aid their learning e.g. the actions which accompany the learning of the sounds, the teacher also ensures that support withdrawal begins at the same moment that the support is offered. This was seen in the classrooms when teachers prevented children from using the actions when blending the sounds to form words and rather required pupils to blend the sounds in their heads. Skilful and timely introduction and withdrawal of the props boosted the development of blending skills and reading fluency. This in turn enhanced comprehension as sluggish decoding is known to prevent comprehension (Chew, 1997). The cycle of provision and withdrawal of support enabled pupils to make easy transition from one level of learning to another ensuring that higher tasks were readily achievable. Hence pupils always inclined to their zone of proximal development (Bodrova and Leong, 2006). The pupils were always stretched just a little more e.g. to blend a word with just one new sound and to spell slightly longer words than the previous set. This helped to ensure that the potentials of the pupils were continuously maximised without their having to be overwhelmed with many new ideas at the same time. Unlike learning new whole words without an idea how the letters became words, pupils were able to join sounds to form words and when the teacher added more sounds to a word<sup>9</sup>, they were also able to decode and to blend with the new sounds.

By this time, the pupils had moved on to the third stage when they started using the synthetic phonics knowledge independently. They would blend in their heads without sounding the words out and began to more easily recognise the position of sounds in words. Although they occasionally referred to the actions when they forgot the pronunciation of a sound, this became a rare occurrence. Whereas they did the actions when attempting to blend words at the beginning, they no longer used actions when blending. Although they still sometimes sounded out words, they were already blending in their heads and identifying the position of the sounds in words without counting the sounds on their arms. At the time of the post-test, pupils still required some external prompts but by then, the prompts were more advanced. Where there once were stories and actions there were now charts for consonant blends and tricky words. At the time of writing, it is now possible to visualise the pupils moving on to the final stage of the learning acquisition, internalisation, where the knowledge becomes

---

<sup>9</sup> W-i-n (win); w-i-n-d (wind)

automatic. At that stage, blending and sounding become unconscious acts and are done with great speed even with words that had not been encountered before. Reading becomes fluent as the words have become well known to the pupil as a result of frequent use. It is then that knowledge is said to have become ingrown or acquired. At such a stage, the pupil becomes self-assisted, no longer relying on the teacher (Zuckerman, 2003; Vygotsky, 1994).

The pupils in this study showed evidence of benefitting from early exposure to the synthetic phonics method. As they learnt to match sounds to the written words, they gradually improved their ability to blend words. They no longer needed to guess a word from its length or visual pattern. They did not need to depend on visual memory which often fails when so many words have similar visual patterns as is the case with the English language (Dixon et al, 2011). The pupils were not required to use context as the primary means of identifying words which are not familiar and to guess from the redundancy of texts. These activities produce poor readers because apart from very common words and grammatical function words, very few words can be exactly predicted from the text. Words that are least likely to be known are also least likely to be predictable (Bowey, 2007). Also, words that are redundant in the text a pupil reads today may be a keyword in future (Adams, 2001). Teaching children to guess at words using pictures as clues diverts their attention from the printed form, and makes remembering or learning the word most unlikely. As a result, such children learn to skip unfamiliar words when reading using context to make sense of the passage. Synthetic phonics taught children do not get stuck when they encounter unknown words but use their knowledge of letters and sounds to decode words which they encounter for the first time as experienced again and again in this study. The findings agree that synthetic phonics method helps children read and write strange words much better than any other method (Johnston and Watson 2005). Early teaching using the synthetic phonics method results in accelerated learning of reading and spelling. Explicit teaching of blending has a significant positive effect on the proportion of spelling mistakes made by learners. The pupils were able to correctly spell words whose sounds they had been taught. Although English writing is more difficult because the same sound may have different written in forms, (Bowey, 2007) pupils in the study would attain correct spelling of words because they have been taught to pay careful attention to their printed forms. Through their exposure to the synthetic phonics method,

the pupils were able to read totally unfamiliar printed words by recoding print into sound (Bowey, 2007). The pupils were becoming cipher readers, readers who process all the letters and sounds in a word. Poor spellers tend not to look at the internal structure of words, guessing as they go and skipping words where necessary but good spellers do. The findings corroborate (Johnston and Watson, 2005) claim that synthetic phonics taught children have been found to be good spellers and they learn unfamiliar and unpredictable words by translating them into sound. Phonics instruction is mandatory for Nigerian pupils as this will enable them achieve the goal of reading instruction which is to teach pupils habits that will enable them become skilled readers and intelligent writers (Ashby and Rayner, 2006). This study, like others previous ones, shows that it is profitable to give beginning readers a programme which emphasises letters, sounds, and decoding skills right from the start (Adams 2001).

### **6.3 Comprehension**

A major concern with synthetic phonics teaching is that decoding does not aid comprehension. As earlier mentioned in Chapter Two, critics claim that calling words does not result in comprehension. The duration of this study was not sufficient to accurately determine the gain in comprehension. However, classroom observation suggests that there was improved comprehension and vocabulary skills. Moreover, other studies have found that pupils gained comprehension skills through synthetic phonics teaching. Johnston and Watson (2005) reports that synthetic phonics taught children were more than nine months ahead in comprehension than children taught by other methods. Decoding was found to be of benefit to reading comprehension. Using sounding as a means to recognise words was used only as a first step towards comprehension and so should be seen as a means to an end (Johnston and Watson 2005, Bowey, 2007 Chall 1996a, Adams 1994, Levy and Lysynchuk 1997). Besides, it is impossible to comprehend a text that one cannot read (Nonweiller, 2010); vocabulary and comprehension skills can be built once the word recognition skill is in place (Dixon et al, 2011). This was evident in the classroom scenes discussed in the previous chapter. Basic word recognition which results from the ability to decode words is essential to reading comprehension. “A code-emphasis is more efficient for beginning readers, producing better results for word recognition and decoding, which in turn makes for better

reading comprehension” (Chall 1996a, p.27). As children decode unknown words, they develop orthographic memory for such words (Watson 1998) thereby increasing the fluency rates of pupils (Martinez and Barnhill, 2011). Improved fluency has been found to improve comprehension skills. “The goal of helping children learn to recognise words quickly and easily is to ensure that word recognition will feed rather than compete with comprehension” (Adams, 2001 p.78). Johnston and Watson (2005) reports that synthetic phonics taught children were more than nine months ahead in comprehension than children taught by other methods.

Although opponents of synthetic phonics assume that synthetic phonics lessons are boring regimented drills, this study confirms that this assumption is unfounded (Bowey, 2007). Phonics lessons, as were the ones used in the study, are often well-designed and filled with fun activities for children. In addition to thoroughly enjoying such activities, children are often motivated by the fact that they can read and even spell new words by themselves after the first few synthetic phonics lessons. Evidence of this abound in the classroom observation scenes shown in Chapters Four and Five. Several scenes depicted pupils’ enjoyment of the lessons and expression of joy, passion, and eagerness at participating in the lessons. Indeed, the classrooms showed no dull moment. Although the pupils were required to learn some aspects by rote and repetition, it was obvious that such learning was not strenuous. They were taught and learnt in the context of fun-filled activities. Indeed, the gains of learning by synthetic phonics is so vast that one must agree with Ashby and Rayner (2006) that one or two years of learning decoding skills is worth the attendant gain of automatic access to thousands of printed words. Synthetic phonics yields great rewards.

It is also worthy of note that the gains made from learning to read with synthetic phonics has been found to be a lasting gain. Bryne, Freebody and Gates (1992), mentioned in Chapter Four, found that although at second grade non-phonics taught children recognised more real words than decoding phonics pupils, by third grade, they fell behind in both word reading and comprehension while the phonics taught children gained greater ability to decode non-words. Johnson and (2005) also report that many years after phonics instruction had ended, pupils continued to benefit from the decoding skills they had learnt. It is worth teaching pupils synthetic phonics from the start as the gains can be expected to be long lasting.

#### **6.4 Clarity of guidance and teacher's theory of teaching**

In Chapter 1, I mentioned a lack of clarity in the guidance of the reading curriculum. The curriculum seemed to vacillate between different methods of teaching reading, some of which were not even familiar to the teachers (Adekola, 2007, Ekpo et al, 2007). For example, it required the teachers to teach pupils the sounds of the words whereas teachers did not know the sounds as they said in the pre-intervention focus group. Teachers implemented the curriculum as they knew best and as a result, the desired outcome (ability to read) was a mirage (Amuseghan). The synthetic phonics method offered clear guidance on each aspect of reading skill to be taught. The improvement in reading skills reported for the synthetic phonics group would not have been possible in the absence of coherent guidance. The guidance provided details of each aspect and relevant examples to which the teacher could add. Thus, whether it was a game, or partner work or role play, each activity was tailored to a purpose. This clarity of guidance influenced the teachers' theory of teaching and offered the teachers an easy transition from teaching reading using the drill approach to teaching reading in a manner which teachers and students found to be effective, yet fun and enjoyable. The inclusion of games and partner work gave the teachers an opportunity to shift from the drill method thereby making the classroom engaging for the pupils. Making the classroom engaging in this manner allows the pupils to take some responsibility for their learning which then makes the pupils active participants in the learning creation process. Teachers found the synthetic phonics method as one which is focused and consistent for teaching reading skills. The guidance was clear and the results were obvious. They saw pupils who would sit clammed up in the class transformed into active participants who engaged with all parts of the lesson. They also became more confident and began to enjoy teaching a subject which they used to dread teaching.

Teachers need clear guidance in order to achieve improvement in pupils' reading skills.

An unintended benefit was that the play and game helped the teachers discover how to use the method they described as the 'play way' method which they had learnt in school but did



not know how to use. The synthetic phonics method helped them to discover their own method and understand their theory.

They found that the synthetic phonics method, which truly was a play-way method, was easy to use and this encouraged them to use the method more. Teachers easily had the attention of pupils and did not have to struggle to keep pupils engaged. They found a method which made their teaching task easier to perform. With such a result, teachers needed no further external persuasion to use the method. The ease with which the teachers gained and retained the pupils' attention resulted in using the method more which in turn resulted in greater ease of use. Such a cycle must have encouraged the teachers to continue using the method even though it required more time from them. They inevitably wrote new lesson notes while their colleagues in non-phonics schools could use the same notes they had used over the years. The synthetic phonics teachers had to learn new games which they taught to the pupils. They also had to listen to the sounds again and again on tapes or compact disk in order to become familiar enough with the sounds to teach the pupils. All of these challenges did not seem to have reduced from their eagerness to teach using the method. This suggests that their measurement of 'loss and gain' indicated that they had more to gain than to lose when they use the synthetic phonics method compared with when they used their traditional method.

In addition to being easy to use, the synthetic phonics method also improved the knowledge of the teachers leading to improved confidence to teach the subject more than when they used the traditional method. Many teachers struggle to teach pupils word reading and writing because of a lack of knowledge of the subject matter.

As mentioned earlier, many teachers are not adequately prepared for the task of teaching pupils to read. This lack of preparedness often results in lack of confidence and hesitancy to teach on the part of the teachers. The effect of this is that literacy or English classes (as they are called) are often boring drills which the teachers as well as the pupils loathe. Each party sees the lesson as an unavoidable event but wished they could avoid it. The findings in this study strongly suggest that when teachers learnt the basics of teaching word reading i.e. the sounds of English and how to blend them to form words; how to count the number of sounds in a word, skills needed for reading and writing words, they gained confidence in their ability

to teach English, and they began to find pleasure in teaching the subject. Confident teachers produced quicker and surer result than what they had using their previous methods.

### **6.5 Pupils**

An essential issue in the findings was the importance of pupil participation. The synthetic phonics classrooms were lively and every pupil was engaged identifying the sound, blending, counting sounds in words or writing on their friends backs. In classrooms, pupils often raised their hands and at the same time jumped off their seats in an attempt to get the teacher to invite them to answer questions. The teacher would then gently remind them to sit down and raise their hands quietly. Because there was constant communication (Walsh 2011) between teacher and pupils, there were questions, games role play which led to constructive movements around the classroom causing most moments to be filled with meaningful and effective activities. It could be said that there were no dull moments in the synthetic phonics classrooms. The multisensory approach of synthetic phonics readily captivated pupils' attention as it required their active participation at all times. As a result, pupils were often seen listening with rapt attention and eagerly awaiting the next instruction from the teacher. They competed heartily for turns to answer questions and participated actively in all games. Added to this was the practice of including all pupils in the learning activities. The role play, partner work, and the games were fun to the pupils. In addition, the role plays and partner works were a useful strategy in boosting the pupils' use of the words learnt thereby improving their vocabulary and comprehension skills. Whereas the control group was often quiet and only the teacher's voice could be heard most times, everyone spoke and was engaged in the activities in the synthetic phonics classroom. This could only result in more learning for the pupils in the synthetic phonics group as evident in the post-test scores of the pupils especially in the phoneme awareness and blending tests. The pupils became more eager to learn as reported by the teachers who said the pupils would often ask when they would have the next phonics lesson.

This was unlike the control classrooms which were much quieter and where there were very few activities; often the same set of few pupils raised their hands to attempt the questions the teacher asked them. Answers had to be precise or the pupils' efforts were barely acknowledged. The teacher gave the turn to another pupil very quickly in a manner which

showed that there was not much time to waste. Because of the number of ways pupils were engaged in the synthetic phonics classrooms, many pupils got rewards and commendation each lesson. This encouraged the pupils to participate even more. Also, because teachers often praised the efforts of the pupils and looked out for what they did well, pupils were confident to make further attempts at making contributions in class.

The pupils became eager to learn and looked forward to their English classes. It can only be expected that such participatory learning environment would yield lasting result as the pupils were guided in constructing their own knowledge. The pupils enjoyed being taught using the synthetic phonics method and they could mention different aspects that they particularly enjoyed. Every aspect identified by the pupils enhanced their learning.

There was no gender difference between the improvements of pupils taught with synthetic phonics. Both male and female pupils improved alike when taught with the synthetic phonics method. The method has sufficient attraction for pupils of both genders. Boys, who may ordinarily find English lessons boring, also have a lot to look forward to in the activities and games. These activities eliminate the boredom and make it easier to retain the attention of the boys. If synthetic phonics method is used to teach, boys may be expected to perform well in literacy tasks (Johnston and Watson 2005).

The synthetic phonics method is suitable for all styles<sup>10</sup> of learning because of its multisensory nature. As such, all learners have their place when this method is used to teach.

If the synthetic phonics method is introduced into the curriculum for teaching English, pupils will be happy to learn, they will be engaged and their learning will improve. If teaching using the synthetic phonics method is continued, pupils will learn to read words very quickly and fluently. This will result in a new generation of pupils who can read and write. There will be improvement in general academic attainment as pupils will now be able to read and understand their examination questions. In addition, it can be hoped that examination malpractice in the form of massive cheating will reduce to the minimum as most pupils will be able to read and attempt examination questions. Also, the pupils will grow into confident

---

<sup>10</sup> Visual, auditory, or kinesthetic

adults who will be able to hold their own in the present age where reading is key to academic and professional success. Such adults will change the national literacy statistics for the better.

### **6.6 Teachers as research partners**

Involving the teachers as action research partners as happened in this study yielded some benefits.

Vogric and Zuljan 2009 stated that involving teachers as research partners causes the teachers to join the researcher in waiting in eager anticipation for the result of the research. This was so in this study because the teachers and the researcher found themselves held in suspense as they watched the progress of the pupils through the intervention. As the teachers found that the pupils made steady progress, they became more and more interested in using the method. The teachers, having been active research participants, did not need any further effort to convince them of the usefulness of the method as they saw the processes unfold. Jester (2012), Hancock (2011), Zeuli and Vogric (1994), and Zuljan (2009) maintain that putting the teachers at the centre of the research is valuable for getting teachers' acceptance of the result of the research. This study corroborated this claim in that the teachers in the study could easily compare the results they achieved when they taught with the synthetic phonics method to the results of teaching with the traditional method. In addition, teachers of neighbouring classes, higher and lower, discovered that the method had produced a more participatory classroom environment and better achieving pupils.

This resulted in enquiries from those colleagues concerning the synthetic phonics teaching method. Such recognition by colleagues is also an example of unintended benefits which nevertheless were gains to the synthetic phonics teachers who found themselves acting as advisers to their colleagues. The synthetic phonics teachers had started sharing the knowledge with their colleagues. This was a more desirable outcome than if the researcher had carried out the intervention alone without involving the teachers. If I taught the pupils as I did in the pilot study, the result may have been better but teaching with the synthetic phonics method may have ended with my exit. But because the teachers actively carried out the intervention and knew how the method worked, they planned to continue teaching using the method (Brown 2007).

In addition to their intention to continue using the method, teachers of the synthetic phonics groups both in the government and private school sectors continued to spread the word about the usefulness of the method. This resulted in an awareness of the method beyond the group of the five synthetic phonics teachers and their immediate colleagues. The resultant effect was a demand for training for more teachers both in private and in government schools. As the request to train all primary one teachers was communicated to the researcher, I expressed my willingness to train the teachers and only asked that I be allowed to conclude my field work and gather the exit data. 11 months after I left the field, I returned to train all available Primary One and Two teachers in the all the government schools in the local government area including the head teachers. I also trained the early year teachers in the private control schools. This further justified my use of action research and also shows that the synthetic phonics method of teaching is one which will be readily acceptable to teachers and as such if the curriculum is made to include synthetic phonics, teachers will easily accept the change and will have a positive attitude to the method.

### **6.7 Effect of Pupils' socioeconomic background**

The findings of this study agree with Hungi and Thungi (2009) who found that in Kenya, pupils' socio economic background had low impact on educational attainment. The socioeconomic background of pupils in this study appeared to have no influence on their literacy achievement. Pupils' improvement was not dependent on the kind of job their parents were engaged in. The pupils were largely of low income background but the few whose parents were engaged in more skilled jobs than others did not record any difference in improvement above the others. Parent literacy did not seem to have a significant influence on the improvement of the pupils taught with synthetic phonics. This finding is significant because in the current Nigerian society, adult literacy is poor. Any teaching method which depends much on parents' support at home may not yield much result as many parents will not be able to assist the pupils. It is therefore an advantage that this method works with little or no home support and does not depend on the existing group of parents to produce a more literate generation.

## **6.8 Teacher Factor**

The findings of the study shows that teacher factors of experience, qualification, and subject speciality do not have any influence on the teacher's ability to teach reading skills using the synthetic phonics method. Although Lai et al (2011) claim that teacher qualification positively correlated with pupil scores, the scores of the pupils in the study did not show any such relationship to teacher qualification. The findings thus agree with Dixon (2003) and Brumfit (1999). Dixon suggested that pupils' scores may have been higher just because high performing pupils were placed in the class of teachers with the higher qualification and Brumfit's study found no correlation between pupils' scores and teacher qualification. Many teachers in the low cost private schools do not have schooling beyond the secondary school level yet the private school pupils improved when taught with the synthetic phonics method more than when taught with the traditional method. Since such schools attract a sizable proportion of pupils, a method such as the synthetic phonics method which does not require high levels of specialty becomes relevant.

A teacher can teach reading skills if they are trained to use synthetic phonics regardless of what subject they learnt as students. This is also a significant finding of the study as primary schools in Nigeria use the class teacher method where one teacher teaches all subjects to the pupils. A method of teaching English which does not depend on the teacher having an English specialty is a valuable one for the community. In addition this study found that teacher's length of experience did not influence the improvement of pupils taught with synthetic phonics method neither does the number of years of teachers schooling. This was evident in the teachers who had the lowest possible qualification and fewer years of experience than the others yet her pupils performed as well and even better than pupils taught by the more experienced teacher. This implies that even newly qualified teachers, equipped with the knowledge of synthetic phonics, would achieve good results.

## **6.9 Mission accomplished?**

The study has successfully answered the research questions set out in Chapter 3. In examining the pre-test and post-test results of the pupils, all pupils demonstrated poor performance in all aspects of reading skills at the pre-test. However, at the post-test, pupils taught with synthetic phonics in both government and private schools significantly

outperformed pupils in the control group in phoneme awareness and blending. Synthetic phonics taught pupils were able to pronounce the sounds of English, read blendable words, identify which sounds are present in words and recognise the position of such sounds in words. They were able to read and to write decodable words much more than the pupils taught with the traditional method. These are the three skills which synthetic phonics enhances and knowledge of which is a strong foundation for good word reading and writing. Such a strong foundation will produce good readers who do not require someone to teach them every new word they come across. Rather, the knowledge gained will continually guide the pupils until they become good reader. As such, the answer to the main question is that synthetic phonics will improve the reading skills of Nigerian pupils.

### **6.10 Limitations**

On the whole, an assessment of the findings obtained in this study must take cognisance of certain facts. Measuring the effect of each variable involved in the intervention is a complex process to say the least. It is impossible, as mentioned in section 3.1 and later in section 6.4, to detach the influence of each variable in comparison to others. As such, synthetic phonics cannot be given the sole credit for the improvement in reading skills observed in the pupils. As mentioned in Chapter Three, in addition to the synthetic phonics training, teachers were also trained to increase student engagement, praise the efforts of the pupils and highlight their successes. This was in sharp contrast to the perfectionist attitude that the teachers used to display to pupils' attempts at answering questions. This factor on its own is known to improve performance at all levels of learning. However, as the games and role play and partner work are an integral part of the synthetic phonics programme, it can be expected that using synthetic phonics method to teach will produce similar effects as obtained in this study. Secondly, there was the possibility of the Hawthorne effect as a result of the newness of the method. Even though the pupils may not have been fully aware that an intervention was going on, they saw the researcher in their classrooms discussing with their teacher or carrying out observation, they were tested twice by the researcher, not their teacher. Also, the workbooks which were made available to each pupil were the only workbook some of the pupils owned besides their exercise books. Although only black and white workbooks were used so as to reduce the novelty effect, the joy of owning the workbook could influence pupil

attitude to the subject. On the part of the teachers, they knew that their pupils would be tested again, that the researcher would measure the extent of success or otherwise of the intervention which they were involved in. Also, the new materials may have influenced the teachers. However, a longitudinal study which follows up on the progress of the pupils for some more years would give a total picture of the effect of the intervention.

### **6.11 Implications of the findings**

Teachers who are already in service will need to be trained in the use of the synthetic phonics method in all the states in the federation. While this may seem like a phenomenal task, it may not be an impossible one to accomplish. As earlier mentioned, this researcher, with the assistance of a research team, has trained all available Primary One and Two teachers and their head teachers in the government schools in Bonny Local Government Area. This happened because the impact of this study was discussed widely by the teachers. An enlarged team, made up of Ekpo et al, local and international literacy charities and publishers, including this researcher, has trained Primary One and Two teachers in two states in Nigeria. At the time of writing up this research, five other states have successfully piloted the method. The team has also raised awareness of the impact of the synthetic phonics to policy makers at the federal government level. Members of this enlarged team have been allowed to speak at curriculum review sessions also. It is hoped that in no distant future, synthetic phonics training will be conducted for appropriate teachers in all the states of the federation and all pupils will have the opportunity to be taught using this method.

In addition to training all the practicing teachers in the whole federation, the curriculum for the National Certificate of Education for primary school teachers should incorporate training in synthetic phonics. This will provide intending teachers with the required skills to teach reading skills to pupils.

Introducing pupils to the synthetic method at the nursery school level may yield better results than in Primary One, which is the third or fourth year of school for many pupils in the Nigerian school system. By Primary One, pupils have already started learning words by rote and teaching them to blend becomes a difficult task.



As observed in the findings, factors relating to availability of the reading books in the house apart from school textbooks had an influence on improving reading skills. Most pupils do not have any reading books whatsoever. Teachers will need to be creative in making reading materials available to pupils as parents may be unable to afford buying storybooks or newspapers. Pupils are often made to copy lengthy notes off the board into their notebooks even though they are unable to read them. Instead of such notes, teachers could write short decodable stories on the board. Pupils could then copy these and take home to read. If this was done once a week, it should enhance pupils' reading skills.

Although the findings of this study, together with that of a previous study, have made a significant contribution to change in the policy on teaching literacy, certain issues still need to be considered in applying the findings. For example, at the beginning of the training, teachers struggled to learn the basic skills and to remember the pronunciation of the sounds. At such times, the researcher's availability helped to provide the needed guidance and to boost the confidence of the teachers. Thus training of teachers should be spread over a period of time in order to impart the proper skills and avoid mass producing teachers who may not necessarily acquire the needed skills. Moreover, there should be clear guidance as well as a robust mentoring scheme for teachers especially at the beginning stage if there is to be a total incorporation of the synthetic phonics method into the national curriculum. It is at this point that teachers can be won or lost to the method. If teachers are unable to make a good start, they may suffer a loss of confidence and revert to the traditional method. If there is clarity of guidance, the type that I made available to the teachers in this study, there is a higher possibility that the teachers will use the method effectively.

### **6.12 My PhD Journey**

It was not often that I met teenagers who could not read words printed on a page but that must be because for a while, I lived in a world of my own, surrounded by people of my own kind<sup>11</sup>, separated from the real world around me. When events threw me into the real Nigeria and gave me the priceless opportunity to interact with children other than those in my immediate family and circle of friends and neighbours, I instantly became aware of a shortfall

---

<sup>11</sup> educated, and able to send their children to well established private schools

in the literacy skills of teenagers and younger children- primary school pupils. The language teacher in me arose in earnest to combat the state of illiteracy. I gathered a group of children together, and determined to teach them how to read and write, thereby in my mind changing their lot for the better. I only taught one lesson before I realised that my good intention would carry me only so far – I did not know what to do differently from what their teachers did. I had come armed with all the same workbooks and textbooks their teachers used. It was immediately obvious to me that the same road would lead to nowhere. A few thoughts, enquiries, and web searches later, and I was on my way to Newcastle University to study how to help children in my country become better readers. The choice of a University in the United Kingdom was obvious; the language to read in Nigeria is English. Some lecturers in Newcastle University did TESOL well and some have trained teachers in developing countries on how to teach pupils to read and write in English. Surely, these would do my quest some good.

In September 2009, I found myself sitting with two of those lecturers. I was sure I wanted to do a case study, and was also sure I desperately wanted a method which would enhance the reading skills of Nigerian pupils. I did not yet know such a method and so had no theory as yet. It has been four years. I have since been introduced to the synthetic phonics method – first by one of my supervisors (Pauline Dixon). I followed on by reading studies which used the method in first language and second language situations. The results were convincing but I could not help wondering if it would work in my situation. However, reading the findings of a research study carried out in a state in Nigeria in 2006 increased my curiosity about the method. The Nigerian research was limited in a number of ways especially as it did not detail the process leading to the reported success of the synthetic phonics method. One of the recommendations of the study was a call for more study into the synthetic phonics method in Nigeria, a call I felt positioned to heed.

Having been given 2-hours training by my supervisor, I learnt first to use the method by carrying out an extensive six month pilot using the action research design. The pilot study was discussed in details in Chapter Three.

The work has maintained its initial design as a case study but action research was incorporated and became favoured because it was a way I could work and be at liberty to modify my actions as I reflected on them during the pilot study. This made it possible for me to see first-hand what worked and what did not and was helpful in the design of the main field work. It was also during the pilot study that the Sociocultural Theory began to appeal to me especially the Zone of Proximal Development theory (ZPD). I started the pilot with a focus on the teaching method only but soon discovered that the classroom exchanges also mattered a lot. The degree to which children felt involved determined the degree to which they engaged and learnt. Timid children became emboldened when they were given room to express their ideas. They enjoyed partner work and did group tasks with delight. As I introduced them to new tasks every day, adding just a little on the previous task, the pupils eagerly participated and learnt. A visit from a colleague a few weeks into the pilot was all I needed to find out that the class still revolved around me as if I owned the knowledge. That helped me to include the pupils all the more and I noticed that they participated more and seemed to learn more. I then decided that the theory most applicable to this situation is the Sociocultural Theory.

I found that having a definite structure to the lesson was helpful to me as the teacher and to the pupils also as we had a clear idea of what we were doing each time. I did not need to search for guidance as one was readily available (Dixon, 2009). I adapted this into a 'scheme of work' which suited my purpose (See Appendix G).

When the time came for the main fieldwork, it was a more confident researcher who went to the field. Having used the method with great success, I trained the teachers on the synthetic phonics teaching method and also shared my tips (the principle of the 5 Ps: Participation, Positive teaching, Pace, Purpose, and Passion) which had become a theory with them. In addition, I gave them the 'curriculum' (my scheme of work). So, armed with three tools- the method, the principles, and the scheme of work, bespoke tools - the teachers went to work. The rest of the story has been written in this book (thesis).

I have joined the team which carried out the 2006 study and some other local and international charities and publisher in advocating for the inclusion of synthetic phonics in

the Nigerian teaching curriculum. While the thesis has been in the writing, thousands of teachers have been trained, policies have changed in whole states, or local government areas of the country to reflect the inclusion of the synthetic phonics method in the teaching curriculum. Negotiations are still in place to embed synthetic phonics in the national curriculum.

In addition to adapting the already existing material into a viable mini curriculum for teaching beginners how to read, I have jointly authored a workbook<sup>12</sup> for teaching synthetic phonics to Nigerian pupils. The workbook uses a similar order to the popular Jolly Phonics workbook and in addition, has contextualised stories, actions and pictures which can enhance comprehension for Nigerian pupils who mostly encounter English for the first time in the classroom. The Read Easy workbook has been used by some private schools for three academic sessions now. The teachers have given positive feedback concerning the workbooks. It was not within the scope of this work to test for the acceptability and impact of Jolly Phonics and Read Easy. This may be a worthy research for the future.

It has been a long journey, more like the pilot's flight than a straight course, sometimes more like a snail crawling than like a sprint. However, sitting back and reflecting on how it all now seems to fit together (hopefully), I think that to be a researcher, one does not need to have everything in place at the start but one does need to have a hunger to learn and a passion for excellence.

---

<sup>12</sup> Read Easy Workbook. We received feedback from Sue Lloyd (author of Jolly Phonics), and from Pauline Dixon, my supervisor.

## **Chapter 7. Conclusion**

### **7.1 Introduction**

The purpose of this study as set forth in Chapter One has been to examine the influence of the synthetic phonics teaching method on the reading attainment of Primary One pupils in government schools and low cost private schools in Nigeria. The specific research location was Bonny Island.

Chapter One described the context of the research, set out the rationale for the study, its aim and significance. Chapter Two reviewed the existing literature in the field and identified the lacuna which the work sought to fill. Chapter Three discussed the design and method of data collection applied in the study. Chapters Four and Five presented the findings from the data collected both quantitatively and qualitatively. Chapter six discussed the findings of the study, identified the limitations and made some recommendations. This chapter discusses the overall significance of the findings of the study, identifies the limitations, offers suggestions for future research and states the overall conclusion of the study.

### **7.2 The Significance of the Findings**

The findings of this study embody a significant contribution to the ongoing debate on how to teach reading skills to pupils. In concluding that synthetic phonics can enhance the reading skills of pupils, the study lends its voice to the synthetic phonics end of the reading debate. As a result, it calls on policy makers to consider including synthetic phonics in the curriculum for beginning readers in Nigeria. The findings are also valuable for resolving issues about raising literacy rates in Nigeria and how Nigeria can attain the MDG of literacy for all. The use of the traditional rote learning method had only served to plunge the nation into the darkness of low literacy. Many pupils were labeled as non-achievers simply because they did not possess sufficient memory to cram endless numbers of words. Teachers gave up on such pupils and in time, they joined the band of illiterate adults and the scale continued to tilt towards adult illiteracy. Teachers equally suffered from insufficient guidance on teaching reading and many simply recycle the method through which they were taught, the same

method that had produced very few achievers and many failures. They lacked confidence in teaching because they did not know what to teach and how to teach.

Through the synthetic phonics method, teachers have found needed guidance and are able to teach with a focus. The aspects of synthetic phonics which require rote learning are taught in easy steps. Because teachers had been used to teaching large chunks of lesson by rote, teaching a few portions thus posed no challenge especially as this is accompanied by fun activities which pupils like to do. Pupils who used to sit silent and tamed became engaged and enthusiastic learners. Although synthetic phonics involves learning rules, there are many opportunities to apply what is learnt. This makes the learning of the rules to be manageable for both teachers and pupils. Consequently, many pupils succeeded in learning the sounds and blending and even applying the knowledge gained to tackling non decodable words within the research period.

This study has found no contradiction between allowing pupils take responsibility for their learning while the teacher guides them to their zone of proximal development and the direct teaching method that synthetic phonics is known for because as mentioned in Chapter 2, there is the synergy that comes from approaching teaching and learning from both the acquisition and participation perspectives. As a result of this, the findings can further the cause of introducing pupils early to the synthetic phonics method and at the same time foster pupil participation in the English language classroom. This will serve to draw teachers' attention to including the pupils in the learning process, allowing them to contribute to their own development rather than merely treating them as though they were empty vessels which needed to be filled.

Much research exists on the use of synthetic phonics to teach pupils how to read and write but in the second language context, where both teachers and pupils are L2 speakers, this researcher found only one study in which the regular classroom teachers delivered the teaching. The published result of this study did not reveal the process but only indicated the difference between the pre-test and the post-test. This present study involved the teachers as co-researchers, sought to work on the teaching theory of teachers and has detailed all the steps from the start of the study to the end such that another intending researcher could find

a map to carrying out a similar research. This study is therefore among the very few available studies which used a combination of teaching method, teaching theory and effective guidance to effect an improvement in the reading skills of L2 English beginning readers.

### **7.3 Limitations and Suggestions for Future Research**

There were certain limitations to this study some of which are reported as follows: firstly, the duration of the study was short. Reading skills require more than six months to develop to a point where results can be notable. As a result, even though students in the synthetic phonics classrooms showed evidence of improvement in their knowledge of sounds and in their ability to read decodable text, their improvement in general reading was not remarkable and their spelling skill did not show any sign of improvement. Further research should be planned as a longitudinal study where the researcher follows up on the development of reading skills over a 2-3 year period.

Secondly, the teachers struggled to learn and remember the sounds and the basics of teaching using the synthetic phonics method. This resulted in a slow start for them while the teachers in the control schools had already started teaching in the usual way they were used to. This must have had a reduction effect on the total influence of the intervention. Further research should include a longer period of training for the teachers. In addition, a series of frequent short workshops with the teachers where issues of concern can be promptly addressed would produce more effective guidance than one focus group discussion at the end of the study. Such workshops would lead to increased knowledge and boost the confidence of the teachers in handling the method.

Thirdly, Bonny Island is a multilingual community and in such communities in Nigeria, some form of English or the other<sup>13</sup> is spoken as a lingua franca. As a result, many children are likely to have some English words in their vocabulary. Further study will be needed to determine the influence of the synthetic phonics method on pupils in monolingual communities whose first real encounter with any form of English is in the classroom.

---

<sup>13</sup> In some instance, this may be Pidgin English.

Another limitation is that the sample size is very small and in addition, the sampling technique being opportunistic does not necessarily allow for generalisation.

Also, the Burt reading and Schonell spelling tests were not phonics based resulting in a lack of clarity regarding the progress of pupils in the phonics group in the aspects of reading and spelling. The use of a more phonics based reading and spelling test in assessing the progress within the phonics group would have given a clearer picture of the influence of phonics teaching on reading and spelling.

As earlier mentioned, it was not possible to isolate the factors arising from the synthetic phonics method from the factors arising from the principles of engagement and participation fostered by the sociocultural theory. The participatory approach which the teachers used could on its own result in improved learning. However, synthetic phonics programmes are often designed with elements of participatory learning.

On the whole, the limitations above do not contradict nor lessen the significance of the findings of the study but only signal that there is more work to do.

#### **7.4 Summary and Conclusions**

The research has investigated how to enhance the reading skills of pupils learning English as L2 for the first time in the classroom environment. Word reading as well as spelling skills of pupils can be improved by the use of synthetic phonics method in a participatory classroom environment. Primarily, the study explored the influence of synthetic phonics method of teaching on the improvement in the reading skills of pupils in primary one. Specifically, the study explored five research questions. First, it examined the improvement in reading skills of pupils taught using the synthetic phonics method in comparison with those taught with the traditional method over a period of six months. Secondly, it explored if there were influences from pupil circumstances like age and gender in the improvement of pupils taught with the synthetic phonics method. Thirdly, the study probed the influence of pupils' family circumstances and of teacher circumstances on their improvement in reading skills when taught with the synthetic phonics method. Fourth, it reviewed the attitudes of teachers and of pupils to the synthetic phonics method. Finally, the study considered individual teachers' mode of implementing the synthetic phonics method. The study applied the principles of



sociocultural theory, the main theoretical framework underpinning the study, in guiding the teachers' implementation of the method.

This research discovered that majority of teachers in the primary school system do not know the sounds of the English language. As revealed in the focus group discussion data, they neither knew the sounds nor were well guided in how to teach pupils reading skills. A review of the curriculum also showed gaps in the guidance the teachers are given for teaching reading skills. Because of these factors, teachers demonstrated a lack of direction and lack confidence in teaching reading. Their methods and efforts did not yield the desired effect of pupils being able to read. However, introducing them to the synthetic phonics method brought some hope that their teaching may begin to yield improvement in reading skills. This hope was realised as pupils who mostly scored zero in all tests of reading skills at the beginning of the study made great improvement at the end of the study period.

Pupils' age had no influence on the improvement in reading skills. Older pupils did not have any better performance than the younger ones or vice versa. This shows that pupils of all ages will likewise benefit from the synthetic phonics method. Indeed, teachers at the focus group discussion suggested that all classes should be taught synthetic phonics as this will improve the reading skills of pupils who are already in the higher classes. Concerning gender, in the government schools, pupils' gender had no influence on their improvement in reading skills as female and male pupils seemed to have recorded corresponding levels of improvement. However, in the private schools, female pupils had higher improvement than did their male counterparts. This leaves room for further studies.

Parental circumstances of work and education did not influence pupils' improvement in reading in this study. Pupils improved regardless of whether parents were in employment or not and regardless of the type of employment their parents were engaged in. Also, educational attainment of pupils' parents did not influence the improvement of pupils. Thus, the study concludes that improvement of pupils taught using synthetic phonics does not depend on parental circumstances. This in itself is a positive finding because the literacy level in the country is poor and it cannot be taken for granted that pupils' parents are literate. A method of teaching which does not require parent literacy is a helpful one in the present

circumstances. However, as noted earlier, even literate parents appeared not to pay attention to their children's reading at home. This was also shown in the findings which revealed that only about two thirds of pupils who had reading books at home read aloud to someone in the house or were read to at home. If pupils receive assistance at home, the situation may have been different.

The study reported great flexibility on the part of the teachers in accepting and implementing the new method. They found the method easy to use and were willing to make personal sacrifices to include the method in their teaching. The sacrifices involved some time and effort. They agreed to learn the new sounds and listened to them again and again on tapes when they forgot. The researcher often found them enthusiastically teaching the actions to the pupils and doing the action. They taught the pupils the games and also played with them. The teachers formed new lesson notes based on the guidance given by the researcher and they made teaching resources like sound and word flash cards in their spare time. They allowed the researcher observe their teaching and were open to her feedback. They even called the researcher on the phone if they felt confused at any point. Also, the teachers willingly attended focus group discussions, shared experiences and made suggestions on how the method could work. At the end of the field research, they expressed the intention to continue using the method and had also informed others that the method was more useful for teaching reading skills than the method they used previously.

In addition, the teachers employed the principles of mediation, collaboration, pair work, and role play in guiding the pupils towards their zone of proximal development (ZPD). They *imbibed* the principle of participatory classroom and ensured that they involved pupils in the teaching and learning. They also praised pupils' efforts and looked for good in the pupils' answers to question rather than simply dismissing attempts that were less than perfect. By so doing, they guided the pupils through the processes of other-regulated to self-regulated.

The study thus concludes that the teachers appreciated the use of synthetic phonics in the English language classroom and they had a positive attitude to the method.

Pupils in turn responded enthusiastically to the synthetic phonics method. They played the games, role played as pupil and teacher learnt the sounds and how to blend, the skills which

the synthetic phonics intervention set out to teach them. They participated actively in class and visibly enjoyed learning through the method. Their attitude to the method showed eagerness to learn and to contribute to the learning in the classroom.

To conclude, synthetic phonics method of teaching beginning readers will enhance the teaching and learning of reading skills. Through the teaching of sounds, blending and sounding skills in a participatory classroom environment, pupils quickly learn the basics of reading which then make them keen to learn more. The positive attitude to learning to read will encourage pupil's interest in reading and the more they read, the more they will want to read. As they discover they can read texts, they will eagerly reach out for more texts to read thereby becoming good readers.

The findings show that pupils improved, teachers considered the method useful enough to tell other teachers about it and request training for all teachers, and pupils demonstrated greater zeal to learn than usual. These and many more findings of this research suggest that the synthetic phonics method has contributed significantly to the improved reading skills experienced by the pupils in the study.

## References

- Abe (1994). "Teaching reading in the Nigerian primary school." Reading Horizons **31**(3): 207-216.
- Adams, M. J. (1994). Beginning to read: thinking and learning about print, Massachusetts Institute of Technology.
- Adams, M. J. (2001). Alphabetic anxiety and explicit systematic phonics instruction: a cognitive science perspective. Handbook of early literacy research. S. B. Neuman and D. K. Dickinson. New York. The Guilford Press: 66-80.
- Adedimeji, A. M. (2007). The linguistic features of Nigerian English and their implications for 21st century English pedagogy. 24th Annual Conference of the Nigeria English Studies Association (NESA) CBN Auditorium, University of Uyo, Akwa Ibom State
- Adedimeji, M. A. (2007). The linguistic features of Nigerian English and their implications for 21st Century English pedagogy. The Abuja Communication **3 (1)**: 157-173.
- Adegbija, E. (1989). "Lexico-semantic Variation in Nigerian English." World Englishes **8**(2): 165-177.
- Adekola, O. A. (2007). Language, literacy and learning in primary schools: implications for teacher development programs in Nigeria A. R. H. D. Department, The World Bank.
- Adeola, M. (2012). Illiteracy rate in Nigeria is 56.9 per cent - UNILORIN VC Nigerian Tribune. Lagos, Nigeria, African Newspapers of Nigeria Plc.
- Agbatogun, A. O. (2012). "Nigerian teachers' integration of personal response system into ESL classroom." International Journal of Education **3**(2): 1-22.
- Aina, A. J., et al. (2011) Poor reading habits among Nigerians: The role of libraries. Library Philosophy and Practice. Available online <http://digitalcommons.unl.edu/libphilprac/529/> Retrieved 12 February, 2014. <http://digitalcommons.unl.edu/libphilprac/529/>
- Ajani, T. T. (2007). "Is There Indeed A Nigerian English?" Journal of Humanities and Social Science **1**(1).
- Akinmade, T. A. and L. O. Salami (2010). Use and Attitudes towards Nigerian Pidgin English among Nigerian university students. Marginal Dialects: Scotland, Ireland and Beyond, Aberdeen: Forum for Research on the Languages of Scotland and Ireland.

- Al-Kahtany, A. H. (1996). "Linguistics from a linguistic and sociolinguistic perspective." International Review of Education **42**(6): 547-562.
- Altenaichinger, A. (2003). Theories of second language acquisition. . Second language acquisition: The interface between theory and practice. Summary of findings of a project-based linguistics seminar. M. Hanak- Hammerl and D. Newby. Austria, University of Graz.
- Amuseghan, S. A. (2007). "ESL curriculum in secondary schools in Nigeria: issues and challenges towards communicative competence." Nebula **4**(2): 319-333.
- Anyachebelu, F. E., et al. (2011). "Strategies for promoting reading skills for the educational development of learners in Anambra State, Nigeria." Journal of Emerging Trends in Educational Research and Policy Studies **2**(4): 211-215.
- Ashby, J. and K. Rayner (2006). Literacy development: insights from research on skilled reading. Handbook of early literacy research. D. K. Dickinson and S. B. Neuman. New York. The Guilford Press: 52-63.
- Bamgbose, A. (1982). "Languages in Contact: Yoruba and English in Nigeria." Education and Development **2**(1): 329-341.
- Bamgbose, A. (1991). Language and the nation. Edinburgh, Edinburgh University press.
- Bardovi-Harlig, K. (2007). One functional approach to second language acquisition: the concept-oriented approach. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey, Erlbaum.
- Barton, D., et al. (2003). Literacy practices. Situated literacies: Reading and writing in context D. Barton and M. Hamilton. London, Routledge.
- Barr, R. (2001). Research on the teaching of reading. Handbook of research on teaching. Richardson. V. (ed.) Washington, American Educational Research Association: 390-415.
- Bastien-Toniazzo, M. and S. Jullien (2001). "Nature and importance of the logographic phase in learning to read." Reading and writing: An interdisciplinary journal **14**: 119-143.
- Beard, R. (1990). Developing Reading 3-13. London, Hodder and Stoughton.
- Beard, R. (1993). Teaching literacy, balancing perspectives London, Hodder and Stoughton.
- (BERA), B. E. R. A. (2004) Revised Ethical Guidelines for Educational Research.
- Berg, B. (2004) Qualitative Research Methods for the Social Sciences. (5th ed.) Pearson, Boston.

Black, J. and Macrauld D. M., (2003). Nineteenth-century Britain. Hampshire, Palgrave Foundations.

Blaikie, N. (2010). Designing social research. Cambridge, Polity Press.

Blake, E. B. and R. W. Blake (2005). Literacy Primer. New York. Peter Lang.

Bloor, M., et al. (2001). Focus groups in social research. Thousand Oaks, Sage Publications.

Bodrova, E. and D. J. Leong (2006). Vygotskian perspectives on teaching and learning early literacy. Handbook of early childhood literacy. D. K. Dickinson and D. Nunan. New York. The Guilford Press. **2**: 243-256.

Bond, L. G. and R. Dykstra (1967). "The cooperative research programme in first-grade reading instruction." Reading Research Quarterly **2**(4): 1-142.

Borda, O. F. (2005). Participatory (action) research in social theory: Origins and challenges. Handbook of action research. P. Reason and H. Bradbury. London, Sage Publications: 27-37.

Bowey, J. A. (2007). "Need for systematic synthetic phonics teaching within the early reading curriculum." Australian Psychologist **41**(4): 79-84.

Bowman, M. and Treiman (2005). "Stepping stones to reading." Theory into Practice: Developmental psychology **43**(4): 295-303.

Bradley, L. and P. E. Bryant (1983). "Categorizing sounds and learning to read - a causal connection." Nature **301** (5899): 419-421.

Brannen, J. (2005). "Mixing methods: The entry of qualitative and quantitative approaches into the research process." The International Journal of Social Research Methodology **8**(3): 173-185.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. Qualitative Research in Psychology, **3**: 77-101.

Britto, P. R., et al. (2006). Reading ahead: effective interventions for young children's early literacy development. Handbook of early literacy research. D. K. Dickinson and D. Nunan. New York, The Guilford Press. **2**: 311-333.

Brown, H. D. (2007). Principles of language learning and teaching. New York, Pearson Educational Inc.

Brown, S. and D. McIntyre (1978). "Factors influencing Teachers' responses to curricular innovations." British Educational Research Journal **4**(1): 19-23.

- Brumfit, C. (1991). Introduction: teaching English to children. Teaching English to children. C. Brumfit, J. Moon and R. Tongue: iv-viii.
- Bryman, A. (2008). Social science research methods. Oxford, Oxford University Press.
- Bryman, A. (2012). Social research methods. Oxford, Oxford University Press.
- Bubier, H. (2010). Nigerian English: Language group specific informational reports, Rhode Island College.
- Burgess, S. (2006). The development of Phonological sensitivity. Handbook of early literacy research. D. K. Dickinson and S. B. Neuman. New York. The Guilford Press. **2**: 90-100.
- Burns, R. B. (2000). Introduction to research methods. London, Sage Publications Ltd.
- Burton, D. (2000). The use of case studies in social science research. Research training for social scientists. D. Burton. London, Sage Publications: 215-225.
- Byrne, et al. (1992). "Longitudinal data on the relations of word reading strategies to comprehension, reading time, and phoneme awareness." Reading Research Quarterly **27**: 141-151.
- Calfee, R. and P. Drum (1986). Research on teaching reading. Handbook of research on Teaching. M. C. Wittrock. London, Macmillan Publishing Company: 804-849.
- Carr, W. and S. Kemmis (2009). Educational Action research: a critical approach. The Sage Handbook of Educational Action Research. S. Noffke and B. Somekh. London, Sage.
- Cattel, J. M. (1886). The time it takes to see and name objects. Mind **11**, 63-65
- Chall, J. S. (1996a). Learning to read: the great debate. Fort Worth, Harcourt Brace College Publishers.
- Chall, J. S. (1996b). Stages of reading development. Fort Worth, Harcourt Brace College Publishers.
- Chew, J. (1997). "Traditional phonics: what it is and what it is not." Journal of Research in Reading **20**(3): 171-183.
- Chomsky, N. (1965). Aspects of the theory of syntax. Cambridge, MIT Press.

Clifford, C. G. (2000). Ethics and politics in qualitative research. California, Sage publications Inc.

Clifford, J. C. (1984). "Buch und Lesen: historical perspectives on literacy and schooling." Review of Educational Research **54**(4): 472-500.

Counihan, C. J. The effects of a synthetic phonics Intervention in a rural low cost private school in Ghana. Education, Newcastle University. **M.Ed.**

Coyne, E., et al. (2012). "Sensitivity to rime unit frequency and children's early word-reading strategies." Journal of Research in Reading **35**(4): 393-410.

Crook, C. and D. Garratt (2005). The positivist paradigm in contemporary social research. California, Sage publications Inc.

Crystal, D. (2003). English as a global language. Cambridge, Cambridge University Press.

Cunningham, E. A. and E. K. Stanovick (1997). "Early reading acquisition and its relation to reading experience and ability 10 years later." Development Psychology **33**(6): 934-945.

Daniels, H. (2001). Vygotsky and Pedagogy. New York, Routledge Falmer.

Danladi, S. S. (2013). "Language policy: Nigeria and the role of English language in the 21st century." European Scientific Journal **9**(17).

de Vaus, D. (2001). Research design in social research. London, Sage Publications Ltd.

Defior, S. and P. Tudela (1994). "Effect of phonological training on reading and writing acquisition." Reading and Writing **6**(3): 299-320.

DeKeyser, R. (2007). Skill acquisition theory. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey, Erlbaum.

Denton, C. A., et al. (2006). Effects of two tutoring programs on the English reading development of Spanish-English bilingual students. The Elementary School Journal. Chicago, University of Chicago Press. **104**: 289-305.

Denzin, N. K. and Y. S. Lincoln (2000). Introduction: the discipline and practice of qualitative research. Handbook of qualitative research. N. K. Denzin and Y. S. Lincoln. California, Sage Publications, Inc.: 1-29. Diagnosis, N. E. S. (2003). 71.

Dixon, P. (2003). The regulation of private schools for low-income families in Andhra Pradesh, India: An Austrian economic approach. Department of Education, University of Newcastle. **PhD.**



Dixon, P. (2009). Teacher Training Manual for Read Write Inc and Jolly Phonics Lesson: Phonics Training for teachers of literacy

Dixon, P., Schagen, I. and Seedhouse, P. (2011). The impact of an intervention on children's reading and spelling ability in low-income schools in India. *School Effectiveness and School Improvement* 2011, 22(4), 461-482.

Dornyei, Z. (2009). The psychology of second language acquisition. Oxford, Oxford University Press.

Dunn, W. E. and J. P. Lantolf (1998). "Vygotsky's zone of proximal development and Krashen's i+1: incommensurable constructs; incommensurable theories." *Language Learning* 48(3): 411-442.

Edem, E., et al. (2011). "Literacy in primary and secondary education in Nigeria." *Journal of Language and Culture* 2(2): 15-19.

Ehri, L. C. (1998). "Research on learning to read and spell: a personal-historical perspective". *Scientific Studies of Reading* 2(2): 97-114.

Erhi, L. C. and T. Roberts (2006). The roots of learning to read and write: acquisition of letters and phonemic awareness. *Handbook of early literacy research*. D. K. Dickinson and S. B. Neuman. New York, Guilford Press 2: 113-134.

Ekpo, C. M., et al. (2007). Jolly Phonics Strategy and the ESL Pupils' Reading Development: a Preliminary Study. 1st Mid Term Conference University of Ibadan.

Ellis, N. (2007). The associative-cognitive CREED. *Theories in second language acquisition: an introduction*. B. VanPatten and J. Williams. New Jersey, Erlbaum.

Ellis, R. (1992). *Second language acquisition and language pedagogy*. Clevedon, Multilingual matters.

Eshiet, O. I. (2010). "Perceived Influence of mobile phone text messaging on the literacy level of semi-literates in Nigeria." *The International Journal of Technology, Knowledge and Society* 6(4): 67-78.

Eshiet, O. I., and White, E. (2010). *Read Easy phonics workbook for pupils*. Bonny. HAFLD.

Eshiet, O. I. (2012). "Synthetic phonics as a tool for improving the reading skills of Nigerian pupils." *Annual Review of Education, Communication, and Language Sciences* 9.

Eshiet, O. I. (2013). "Teachers' attitude to synthetic phonics intervention in developing English literacy among Nigerian pupils." *The International Journal of Technology, Knowledge and Society* 8(4): 83-92.

- Fafunwa, B. A. (1976). History of education in Nigeria UK, George Allen and Unwin.
- Fakeye, D. A. and Y. Ogunsuji (2009). "English language proficiency as a predictor of academic achievement among EFL students in Nigeria." European Journal of Scientific Research **37**(3): 490-495.
- Fakeye, D. A. and A. Soyinka (2009). "Indigenous Languages in Pre-Primary and Primary Education in Nigeria: Beyond the Facade." European Journal of Social Sciences **10**(4): 565-573.
- Foxcroft, N. (2010). Blending Poster.
- Freire, P. (2005). 30th anniversary edition Pedagogy of the Oppressed. New York, Continuum.
- Frith, U. (1985). Beneath the surface of developmental dyslexia. London, Erlbaum.
- Gas, S. M. and A. Mackey (2007). Input, Interaction, and output in second language acquisition. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey, Erlbaum.
- Gass, S. and L. Selinker (2008). Second language acquisition: an introductory course. New York, Routledge.
- Gobo, G. (2011). Observation. Qualitative research. D. Silverman. London, Sage Publication Inc.: 13-34.
- Goldenberg, C., Ed. (1994). Promoting early literacy development among Spanish speaking children: Lessons from two studies. Getting reading right from the start Boston, Allyn and Bacon.
- Goldenberg, C., et al. (1992). "Effects of school literacy materials on Latino children's home experiences and early reading achievement." American Journal of Education **100**: 497-536.
- Goodman, Y. S. and K. S. Goodman (1995). Vygotsky in a whole language perspective. Vygotsky and education: Instructional implications and applications of sociohistorical psychology. L. C. Moll. Cambridge, Cambridge University Press.
- Goswami, U. (1986). "Children's use of analogy in learning to read: A developmental study." Journal of Experimental Child Psychology **42**(1): 73-83.
- Goswami, U. (2005). "Synthetic phonics and learning to read: a cross-language perspective." Educational Psychology **21**(4): 273-282.
- Goswami, U. and P. E. Bryant (1992). Rhyme, analogy, and children's reading. New Jersey.

- Gough, P. B., et al. (1992). Reading, spelling, and the orthography cipher. New Jersey.
- Grabe, W. (2009). Reading in a second language: moving from theory to practice. New York, Cambridge University Press.
- Greene, J. C. (2007). Mixed methods in social enquiry. San Francisco, Jossey-Bass.
- Greene, J. C. and V. J. Caracelli (2003). Making paradigmatic sense of mixed method practice. Handbook of mixed methods in social and behavioral research C. Teddlie and A. Tashakkori. California, Sage Publications Inc.: 91-110.
- Greenwood, D. J. and M. Levin (2000). Reconstructing the relationships between universities and societies through action research. Handbook of qualitative research. N. K. Denzin and Y. S. Lincoln. California, Sage Publication Inc: 85-106.
- Guest, G. S., et al. (2012). Applied thematic analysis. Thousand Oaks, Sage
- Gunn, B., et al. (2000). "The efficacy of supplemental instruction in decoding skills for Hispanic and non-Hispanic students in early elementary school." The Journal of Special Education **34**(2): 90-103.
- Gunn, G., et al. (2002). "Supplemental instruction in decoding skills for Hispanic and non-Hispanic students in early elementary school: a follow-up." The Journal of Special Education **36**(2): 69-79.
- Hakim, C. (2000). Research design: successful designs for social and economic research, Routledge.
- Hall, K., Ed. (2006). How children learn to read and how phonics helps. Phonics: Practice, research and policy. London, Sage Publications.
- Hall, N. (1994). The emergence of literacy. London, Hodder and Stoughton.
- Hancock, C. R. (2001). The teaching of second languages: research trends. Handbook of research on teaching V. Richardson. Washington, American Educational Research Association: 358-369.
- Harrison, C. (2004). Understanding reading development. London, Sage Publishers.
- Hartas, D. (2011). "Families' social backgrounds matter: socio-economic factors, home learning and young children's language, literacy and social outcomes " British Educational Research Journal **6**: 893-914.
- Heath, S. B. (1986). Critical factors in literacy development. Cambridge, Cambridge

University Press.

Hungi, N. and F. W. Thuku (2010). "Differences in pupil achievement in Kenya: Implications for policy and practice." International Journal of Educational Development **30**(1): 33-43.

Idowu, O. A. (1999) Regional variations in English in Nigeria and the implications for its teaching as a second language. Available online <http://www.unilorin.edu.ng/journals/education/ije/june1999/REGIONAL%20VARIATIONS%20IN%20ENGLISH%20IN%20NIGERIA%20AND%20THE%20IMPLICATIONS%20FOR%20ITS%20TEACHING%20AS%20A%20SECOND%20LANGUAGE.pdf> Retrieved February 15, 2014.

Igwe, N. K. (2011). Reading culture and Nigeria's quest for sustainable development. Library Philosophy and Practice. Available online <http://digitalcommons.unl.edu/libphilprac/482/>. Retrieved February 15, 2014.

Ilogho, J. E. (2011). The Rising Population of Aliterates in Nigerian Schools: Role of School Libraries. Library Philosophy and Practice. Available online <http://www.webpages.uidaho.edu/~mbolin/lpp2011.htm> Retrieved February 15, 2014

Jester R (2010) Combining research methods: Case studies and action research in Roberts P and Priest H (2010) Healthcare Research: A Textbook for students and practitioners. Wiley, Blackwell.

Johnston, R. and Watson, J. (2004). "Accelerating the development of reading, spelling and phonemic awareness skills in initial readers." Reading and Writing **17**(4): 327-357.

Johnston, R. S. and J. E. Watson (2005). The effects of synthetic phonics teaching on reading and spelling development: a seven year longitudinal study. S. E. E. Department. Edinburgh.

Johnston, R. S., et al. (2011). "Long-term effects of synthetic versus analytic phonics teaching on the reading and spelling ability of 10 year old boys and girls".

Jolliffe, W., et al. (2012). Teaching systematic synthetic phonics in primary schools. London, Sage.

Jones, L. and B. Somekh (2005). Observation. Research methods in the social sciences. B. Somekh and C. Lewin. California, Sage Publications Inc.

Jowitt, D. (1999). Nigerian English usage: An introduction. Ikeja, Longman Nigeria Ltd.

Juel, C., et al. (1986). "Acquisition of Literacy. A Longitudinal Study of Children in First and Second Grade." Journal of Educational Psychology **78**(4): 243-255.

Kamaldeen, A., et al. (2012) Perception, attitude and practices of parents in Okene, Nigeria towards girl-child education. International Journal of Scientific and Research Publications 1-7 DOI: <http://www.ijsrp.org/research-paper-0812/ijsrp-p0803.pdf>

Krashen, S. D. (1981). Attitude and aptitude in second language acquisition and learning. Second language acquisition and second language learning Oxford, WPergamon Press: 19-39.

Krashen, S. D. (1981). The role of first language in second language acquisition. Second language acquisition and second language learning Oxford, Pergamon Press: 64-69.

Krashen, S. D. (1989). The power of reading. Language acquisition and language education. New York, Prentice Hall: 89-113.

Krashen, S. D. (1989). Second language acquisition theory and the preparation of teachers: toward a rationale. Language acquisition and language education: 43-54.

Krueger, R. A. and M. A. Casey (2009). Focus groups: a practical guide for applied research. Los Angeles, Sage Publications.

Kumaravadivelu, B. (2006). Understanding language teaching. London, Lawrence Erlbaum Associates.

Lambert, E., et al. (2012). "Impact of early code-skill and oral-comprehension training on reading achievement in first grade." Journal of Research in Reading **35**(4): 427-445.

Landry, S. H. and K. E. Smith (2006). The influence of parenting on emerging literacy skills. Handbook of early literacy research. D. K. Dickinson and D. Nunan. New York, The Guilford Press. **2**: 135-147.

Lantolf, J. P. (2000). Sociocultural theory and second language learning. Oxford, Oxford University Press.

Lantolf, J. P. and G. Apel (1994). Theoretical framework:an introduction to Vygotskian approaches to second language research. Vygotskian approaches to second language research. J. P. Lantolf and G. Apel. USA, Ablex Publishing Corporation: 1-32.

Lantolf, J. P. and M. E. Poehner (2008). Introduction to Sociocultural theory and the teaching of second languages. Sociocultural theory and the teaching of second languages. J. P. Lantolf and M. E. Poehner. London, Equinox Publishing Ltd.

Lantolf, J. P. and S. L. Thorne (2006). Sociocultural theory and the genesis of second

language development. Oxford, Oxford University Press.

Lantolf, J. P. and S. L. Thorne (2007). Sociocultural theory and second language learning. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey, Erlbaum.

Levin, I. and D. Aram (2012). "Mother-child joint writing and storybook reading and their effects on kindergartners' literacy: an intervention study." Reading and Writing **25**(1): 217-249.

Levy, B. A., et al. (2006). "Understanding print: Early reading development and the contributions of home literacy experiences." Journal of Experimental Child Psychology **93**(1): 63-93.

Levy, B. A. and L. Lysynchuk (1997). "Beginning word recognition: benefits of training by segmentation and whole word methods." Scientific Studies of Reading **1**(4): 359-387.

Lightbown, P. and N. Spada (1999). How Languages are learned. Oxford. Oxford University Press.

Linan-Thompson, S. and P. Hickman-Davis (2002). "Supplemental reading instruction for students at risk for reading disabilities: improve reading 30 minutes at a time." Learning Disabilities Research and Practice **17**(4): 242-251.

Lincoln, Y. S. and E. G. Guba (2000). Paradigmatic controversies, contradictions, and emerging confluences. California, Sage Publications Inc.

Lloyd, S. (1992). The phonics handbook, Jolly Learning Ltd.

Lloyd, S. (2010). Using decodable readers. Reading Reform Foundation. Birkbeck College, London.

Lloyd, S. (2013). Authorship of the '5 Basic Skills'. O. I. Eshiet.

Lonigan, C. J. (2006). Conceptualizing phonological processing skills in prereaders. Handbook of early childhood literacy research. D. K. Dickinson and S. B. Neuman. New York, The Guilford Press. **2**: 77-89.

Mabekoje, O. (2011). "Effects of S-Q-3-R Aand 3-S-3-R study strategies on senior secondary school students' academic achievement in reading comprehension" Journal of the Nigeria English Studies Association **14**(2): 24.

MacWhinney, B. (1997). Second language acquisition and the competition model. Tutorials in bilingualism: psycholinguistics perspectives. M. B. de Groot and J. F. Kroll. New Jersey,

Erlbaum.

Madichie, N. O. and E. I. Madichie (2013). "Nigeria students and the "allure" of foreign (UK) Education: a curious reflection." Journal of Business and Economic Research **8**(2 and 3): 101-118.

Mallory, J. P. (1989). In search of the Indo-Europeans: language, archaeology and myth London, Thames and Hudson.

Marshall, C. and B. R. Gretchen (2006). Designing qualitative research. California, Sage Publications Inc.

Martinez, R. and A. Barnhill (2011). "Impact of MP3 players on the fluency rate of beginning readers." The International Journal of Technology, Knowledge and Society **7**(2).

Mills, E. G. (2007). Action Research: A guide for the teacher researcher. New Jersey, Prentice Hall.

Miskin, R. (2006). Read-Write Inc: Phonics handbook. Oxford, Oxford University Press.

Mitchell, R. and F. Myles (1998). Second language learning theories. London, Arnold.

Moore, D. S. (2010). The basic practice of statistics. New York, W.H Freeman and Company.

Morais, J. (1994). "Reasons to pursue the study of phonological awareness." Reading and Writing **6**(3): 219-220.

National Population Commission (NPC) (2012). "Nigeria over 167 million population: Implications and challenges ". Retrieved February 17, 2013.

Neumann, M. M., et al. (2011). Multisensory methods for early literacy learning. Beyond the Lab: Applications of Cognitive Research in Memory and Learning. G. Andrews and D. L. Neumann. New York, Nova Science Publishers.

Newbury, M. (2012). "Preparing for the year 1 phonics screening check." Primary Teacher Update **1**(9): 48-52.

Nonweiler, E. (2009). Letters and sounds- a revolution in teaching of reading. RRF Newsletter, RRF.

Nunan, D. (2007). Research methods in language learning. Cambridge, Cambridge University Press.

Okedara, J. T. and C. A. Okedara (1992). "Mother-Tongue literacy in Nigeria." Annals of the

American Academy of Political and Social Science **520**: 91-102.

Olupona, J. K. (2013). Why Nigerians go abroad for varsity education. Unilorin Bulletin **5** (67).

Ong, M. W. (2002). *Orality and literacy: The technologizing of the word*, Taylor and Francis.

Omolewa, M. (2008). "Adult literacy in Africa: The push and pull factors." International Review of Education **54**(5-6): 697-711.

Ortega, L. (2005). "For what and for whom is our research? The ethical as transformative lens in instructed SLA." Modern Language Journal **89**(3).

Pagano, R. R. (2011). Understanding Statistics in the Behavioral Sciences. Wadsworth, Cengage Learning

Pahl, K. and J. Rowsell (2012). *The New Literacy studies and teaching literacy: Where we were and where we are going*.

Paran, A. and E. Williams (2007). "Editorial: reading and literacy in developing countries." Journal of Research in Reading **30**(1): 1-6.

Paul, L. M., et al. (2013). "Ethnologue: Languages of the World." 17th. Retrieved 5th September, 2013, 2013, from <http://www.ethnologue.com>.

Payne, G. and J. Payne (2004). Key concepts in social research. Singapore, SAGE Publications Asia-Pacific.

Pellegrini, A. D. (2001). Some theoretical and methodological considerations in studying literacy in social context. Handbook of early literacy research. S. B. Neuman and D. K. Dickinson. New York. The Guilford Press: 54-65.

Pflaum, S. W., et al. (1980). "Reading instruction: a quantitative analysis." Educational Researcher **9**: 12-18.

Phillips, B. M. and J. K. Torgesen (2006). Phonemic awareness and reading: beyond the growth of initial reading accuracy. Handbook of early literacy research. D. K. Dickinson and D. Nunan. New York. The Guilford Press. **2**: 101-112.

Pianta, R. C. (2004). Relationships among children and adults and family literacy. Handbook of family literacy. B. Wasik. Mahwah, NJ. Erlbaum: 175-192.

Pianta, R. C. (2006). Teacher-child relationships and early literacy. Handbook of early



literacy research. D. K. Dickinson and S. B. Neuman. New York. The Guilford Press. **2**: 149-162.

Pienemann, M. (1998). Language Processing and Second Language Development. Processability theory. NL, John Benjamins.

Pienemann, M. (2007). Processability theory. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey, Erlbaum.

Prator, C. H. (1969). "Adding a second language". TESOL Quarterly **3**(2): 95-104.

Punch, M. (1985). The politics and ethics of fieldwork. California, Sage Publications Inc.

Quiroga, T., et al. (2002). "Phonological Awareness and Beginning Reading in Spanish-Speaking ESL First Graders: Research into Practice." Journal of School Psychology **40**(1): 85-111.

Rainey, R. (2000). "Action research and the English as a foreign language practitioner: time to take stock." Educational action research **8**(1): 65-91.

Reese, E., et al. (2010) A Review of parent interventions for preschool children's language and emergent literacy. Journal of Early Childhood Literacy **10**,

Rist, C. R. (2000). Influencing the policy process with qualitative research. California, Sage Publications Inc.

Rixon, S. (1991). The role of fun and games activities in teaching young learners. Teaching English to children. C. Brumfit, J. Moon and R. Tongue. London, Harper Publishers: 33-48.

Rose, J. (2006). Independent review of the teaching of early reading, final report, March 2006. Nottingham, DfES Publications.

Rossman, G. B. and C. Marshall (2006). Designing qualitative research. California, Sage Publications.

Rowntree, D. (1981). Statistics without tears. New York, Charles Scribner's Sons.

Ryan, G. W. and R. H. Bernard (2000). Data management and analysis method. California, Sage Publication Inc.

Ryan, A. (2004). Ethical issues. Qualitative research practice. C. Seale, G. Gobo, G. J. F. and D. Silverman. London, Sage Publications Inc.: 230-247.

- Ryen, A. (2011). Ethics and qualitative research. Qualitative research. D. Silverman. London, Sage Publications Ltd.: 416-438.
- Salskind, N. J. (2008). Statistics for people who (think they) hate statistics. Thousand Oaks, Sage Publications Inc.
- Saracho, O. N. and B. Spodeck (2009). Parents and children engaging in storybook reading. Early Child Development and Care. **180**: 1379-1389.
- Schinke-Llano, L. (1995). Reenvisioning the second language classroom: a Vygotskian approach. Second language acquisition: theory and pedagogy. F. R. Eckman, D. Highland, P. W. Lee, J. Mileham and R. R. Weber. New Jersey, Lawrence Erlbaum Associates Inc.
- Schonell, F. J. and E. Goodacre (1974). The psychology and teaching of reading. Edinburgh, Oliver and Boyd.
- Scott, D. and M. Morrison (2005). Key ideas in educational research. London, Continuum International Publishing Group.
- Sert, O. (2011). A micro-analytic investigation of claims of insufficient knowledge in EAL classrooms. School of Education, Communication and Language Sciences, Newcastle University.
- Sešek, U. (2007). "English for teachers of EFL – Toward a holistic description." English for Specific Purposes **26**(4): 411-425.
- Seymour, P. H. K., et al. (2003). "Foundation literacy acquisition in European orthographies." British Journal of Psychology **94**: 143-174.
- Seymour, P. H. K. and H. M. Evans (1994). "Levels of phonological awareness and learning to read." Reading and Writing **6**(3): 221-250.
- Sfard, A. (1998). "On Two Metaphors for Learning and the Dangers of Choosing Just One" Educational Researcher **27**(2): 4-13.
- Shapiro, M. S. (1983). Child's garden: the kindergarten movement from Froebel to Dewey. University Park. The Pennsylvania State University Press
- Sheskin, D. J. (2004). Handbook of Parametric and Nonparametric Statistical Procedures. New York, Chapman and Hall/CRC.
- Siegel, S. and J. N. Castellan Jr (1988). Nonparametric statistics for the behavioural sciences. New York, McGraw-Hill Book Company.

- Silver, C. (2008). Participatory approaches to social research. Researching social life. N. Gilbert. London, Sage publications Ltd.
- Smith, E. (2008). "Raising standards in American schools? Problems with improving teacher quality." Teaching and Teacher Education **24**(3): 610-622.
- Snowling, M. J., et al. (2007). "Children at family risk of dyslexia: A follow-up in adolescence." Journal of Child Psychology and Psychiatry **48**: 609-618.
- Stark, S. and H. Torrance (2005). Case Studies. Research Methods in the social sciences. B. Somekh and C. Lewin. California, Sage Publications Inc.
- Stevens, L. P. and T. W. Bean (2007). Critical literacy: Context, research, and practice in the K-12 classroom. California, Sage Publications.
- Stewart (2012). Number of Nigerian students set to reach 30,000 PM News.
- Stewart, D. W., et al. (2007). Focus groups theory and practice. Thousand Oaks, California, Sage Publications Inc.
- Stuart, M. (1999). "Getting ready for reading: Early phoneme awareness and phonics teaching improves reading and spelling in inner-city second language learners " British Journal of Educational Psychology **69**: 587-605.
- Swift, L. and S. Piff (2010). Quantitative methods for business, management and Finance. New York, Palgrave Macmillan.
- Tharp, R. G. and Gallimore, R. (1988). Rousing minds to life. Teaching, learning, and schooling in social context. Cambridge, Cambridge University Press.
- Taylor, D. (1983). Family literacy: young children learning to read and write. New Hampshire Heinemann educational Books Inc.
- Teddlie, C. and A. Tashakkori (2003). Major issues and controversies in the use of mixed methods in social and behavioral sciences. Handbook of mixed methods in social and behavioral research. C. Teddlie and A. Tashakkori. California, Sage publications, Inc.
- Teddlie, C. and A. Tashakkori (2003). The research enterprise in the behavioral sciences: now and then. Handbook of mixed methods in social and behavioral research. C. Teddlie and A. Tashakkori. California, Sage Publications, Inc.: 3-50.
- Tene, R. (2012). Nigeria: 45 Million Nigerians Illiterate All Africa Newspaper.
- The national literacy survey. (2010). N. C. f. M. L. Media and Marketing Communications Group, Adult and Non Formal Education. Nigeria.

Tooley, J. and P. Dixon (2006). "'De facto' privatisation of education and the poor: implications of a study from sub-Saharan Africa and India." Compare **36**(4): 443-462.

Tooley, J., et al. (2005). "Private and public schooling in low-income areas of Lagos State, Nigeria: A census and comparative survey." International Journal of Educational Research **43**: 125-146.

Torgerson, C., et al. (2006). A Systematic review of the research literature on the use of phonics in the teaching of reading and spelling. DfES. University of Sheffield.

Toure (2014). Solid minerals development as a catalyst to employment generation Leadership Newspaper.

Treiman, R., and Kessler, B. (2013). Learning to use an alphabetic writing system. Language Learning and Development, 9, 317-330. doi:10.1080/15475441.2013.812016

Tudge, J. (1995). Vygotsky, the zone of proximal development, and peer collaboration: Implications for classroom practice. Cambridge, Cambridge University Press.

Turnmer, E. W. and W. A. Hoover (1992). New Jersey.

Twist, L., et al. (2003). Reading All Over the World: the PIRLS National Report for England. Slough, NFER.

Twum-Damso, I., Okyere, S. and Secker, E. (2012) Facilitating Children's participation in the Niger Delta.

Udonquak, A. (2010). Literacy rate and Nigeria's economic growth. BusinessDay Online. Lagos.

UNESCO (2012). Adult and youth literacy, 1990-2015 Analysis of data for 41 selected countries. Canada, UNESCO Institute for statistics.

Usha, G. and P. Bryant (1999). Phonological skills and learning to read. East Sussex, Psychology Press Ltd.

VanPatten, B. and A. G. Benati (2010). Key terms in second language acquisition. London, Continuum International Publishing Group.

VanPatten, B. and J. Williams (2007). Early theories in second language acquisition. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey, Erlbaum.

VanPatten, B. and Williams, J. (2006). Introduction: the nature of theories. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey,

Erlbaum.

Vaughn, P., et al. (2006). "Effectiveness of an English Intervention for First-Grade English language learners at risk for reading problems." The Elementary School Journal **107**(2): 153-180.

Vaughn, S., et al. (1996). Focus group interviews in education and psychology. California, Sage Publications, Inc.

Vauhn, S., et al. (2006). Effective interventions for English language learners (Spanish-English) at risk for reading difficulties. Handbook of early literacy research. D. K. Dickinson and D. Nunan. New York. The Guilford Press. **2**: 185-197.

Venkatesh, V., et al. (2003). "User Acceptance of Information Technology: Toward a Unified View." MIS Quarterly **27**(3): 425-478.

Vogric, J. and M. V. Zuljan (2009). "Action research in schools – an important factor in teachers' professional development." Educational Studies **35**(1): 53-63.

Vygotsky, L. S. (1978). Mind in society. Cambridge. Cambridge University Press.

Vygotsky, L. S. (1994). The problem of the cultural development of the child. The Vygotsky reader. R. V. D. Veer and J. Valsiner. Cambridge, Blackwell: 57-72.

Vygotsky, L. S. (1994). The Vygotsky reader Oxford, Blackwell.

Wagner, R. K. and J. K. Torgesen (1987). "The Nature of Phonological Processing and Its Causal Role in the Acquisition of Reading Skills." Psychological Bulletin **101**(2): 192-212.

Wallace, M. J. (1998). Action Research for language teachers. Cambridge, Cambridge University Press.

Walsh, S. (2006). Investigating classroom discourse London, Routledge.

Walsh, S. (2011). Exploring classroom discourse: Language in action. Oxon, Routledge.

Washtell, A. (2008). Getting to grips with phonics. Reading under control: teaching reading in the primary school. J. Graham and A. Kelly. Oxon, Routledge.

Watson, J. (1998). An investigation of the effects of phonics teaching on children's progress in reading and spelling, University of St Andrews. **PhD**.

White, L. (2007). Linguistic theory, universal grammar, and second language acquisition. Theories in second language acquisition: an introduction. B. VanPatten and J. Williams. New Jersey, Erlbaum.

Whitehurst, G. J. and C. J. Lonigan (1998). "Child development and emergent literacy." Child development **69**(3): 848-872.

Whitehurst, G. J. and C. J. Lonigan (2006). Emergent literacy: development from prereaders to readers. Handbook of early literacy research. S. B. Neuman and D. K. Dickinson. New York. The Guilford Press: 11-29.

Wicox, A. K., et al. (2013). "Just-in-time pedagogy: teachers' perspectives on the response to intervention framework." Journal of research in reading **36**(1).

Williams, E. and J. Cooke (2002). "Pathways and labyrinths: language and education in development." TESOL Quarterly **36**(3): 297-322.

Wright, T., Ed. (2006). Managing classroom life. Understanding the Language Classroom. Basingstoke, Palgrave.

Wyse, D. and U. Goswami (2008). "Synthetic phonics and the teaching of reading." British Educational Journal **34**(6): 691-710.

Yates (2007). "Ethics in practitioner research: an issue of quality " Research Papers in Education **22**(2).

Yin, R. K. (2009). Case study research: design and methods. California, Sage Inc.

Zeuli, J. S. (1994). "How do teachers understand research when they read it?" Teaching and Teacher Education **10**(1): 39-55.

Zuckerman, G. (2003). The learning activity in the first year of schooling: the developmental path toward reflection. Vygotsky's educational theory in cultural context. A. Kozulin, B. Gindis, V. Ageev and S. Miller. New York, Cambridge University Press: 177-199.

# Appendix A: Miskin's Phoneme Awareness Test

11 Assessment and grouping

Assessment A: Speed Sounds Cards Set 1

One tick - knows the sound. Two ticks - can read at speed.

m	a	s	d	t
i	n	p	g	o
c	k	u	b	f
e	l	h	sh	r
j	v	y	w	th
z	ch	qu	x	ng
nk				

## Appendix 2: Oral Blending Test

### Assessment B: Oral sound-blending

Say the word in pure Fred Talk. Ask the child to say the word.

s-i-t	m-e-n	c-a-t	ch-i-n	c-u-p	n-e-ck	p-o-t	l-e-g	sh-o-p	p-a-n
b-a-ck	r-a-t	s-i-t	g-o-t	t-a-p	b-o-p	p-e-t	j-o-t	p-e-g	h-u-g
Total.	/20								



### Appendix C: THE BURT Read-aloud Test: 1974 Revision

to is up he at  
for my sun one of  
big some his or an  
went boys that girl water  
just day wet pot things  
no told love now sad  
nurse carry quickly village scramble  
journey terror return twisted shelves  
beware explorer known projecting tongue  
serious domineer obtain belief luncheon  
emergency events steadiness nourishment fringe  
formulate scarcely universal commenced overwhelmed  
circumstances destiny urge labourers exhausted  
trudging refrigerator melodrama encyclopaedia  
apprehend  
motionless ultimate atmosphere reputation binocular  
economy theory humanity philosopher contemptuous  
autobiography excessively champagne terminology  
perambulate  
efficiency unique perpetual mercenary glycerine  
influential atrocious fatigue exorbitant physician  
microscopical contagion renown hypocritical fallacious  
phlegmatic melancholy palpable eccentricity  
constitutionally  
alienate phthisis poignancy ingratiating subtlety

## Appendix D

### REVISED NORMS FOR BURT (RE-ARRANGED)

#### WORD READING TEST

Score		2	3	4	5	6	7	8	9	10
Reading Age		5.3	5.3	5.4	5.5	5.5	5.6	5.6	5.7	5.7
Score	11	12	13	14	15	16	17	18	19	20
Reading Age	5.8	5.9	5.9	5.10	5.11	5.11	6.0	6.1	6.1	6.2
Score	21	22	23	24	25	26	27	28	29	30
Reading Age	6.2	6.3	6.4	6.5	6.5	6.6	6.7	6.8	6.8	6.9
Score	31	32	33	34	35	36	37	38	39	40
Reading Age	6.9	6.10	6.11	7.0	7.1	7.2	7.3	7.4	7.5	7.5
Score	41	42	43	44	45	46	47	48	49	50
Reading Age	7.6	7.7	7.8	7.9	7.10	7.11	8.0	8.1	8.2	8.3
Score	51	52	53	54	55	56	57	58	59	60
Reading Age	8.4	8.5	8.6	8.7	8.8	8.9	8.10	9.0	9.1	9.2
Score	61	62	63	64	65	66	67	68	69	70
Reading Age	9.3	9.4	9.6	9.7	9.8	9.9	9.10	10.0	10.1	10.2
Score	71	72	73	74	75	76	77	78	79	80
Reading Age	10.3	10.4	10.6	10.7	10.9	10.10	10.11	11.0	11.1	11.3
Score	81	82	83	84	85	86	87	88	89	90
Reading Age	11.4	11.5	11.6	11.7	11.9	11.10	11.11	12.0	12.1	12.3
Score	91	92	93	94	95	96	97	98	99	100
Reading Age	12.4	12.5	12.6	12.7	12.9	12.10	12.11	13.0	13.1	13.3
Score	101	102	103	104	105	106	107	108	109	110
Reading Age	13.4	13.6	13.6	13.7	13.9	13.10	13.11	14.0	14.1	14.3

## Appendix E Schonell Spelling test (1952)

### Schonell Spelling Test

see	cut	mat	in	ran
bag	ten	hat	dad	bed
leg	dot	pen	yet	hay
good	till	be	with	from
time	call	help	week	pie
boat	mind	sooner	year	dream
sight	mouth	large	might	brought
mistake	pair	while	skate	stayed
yoke	island	nerve	join	fare
iron	health	direct	calm	headache
final	circus	increase	slippery	lodge
style	bargain	copies	guest	policy
view	library	cushion	safety	patient
account	earliest	institution	similar	generous
orchestra	equally	individual	merely	enthusiastic
appreciate	familiar	source	immediate	breathe
permanent	sufficient	broach	customary	especially
materially	cemetery	leisure	accredited	fraternally
subterranean	apparatus	portmanteau	politician	miscellaneous
mortgage	equipped	exaggerate	amateur	committee

Spelling Age = no. of correctly spelt words + 5

10

for example: SA = 25 + 5 = 7.5 years

10

## Appendix F: Schonell Convention

### Spelling Test Procedure (Schonell)

1. Test entire group at one time
2. Use foolscap paper. On the top of paper should be written
  - a. child's name
  - b. the date
  - c. A or B test
  - d. the score
3. Explain the procedure
  - a. words given and marked in groups of ten
  - b. a boy continues his test until he makes ten mistakes in succession
  - c. words to be written in a column, not across the page, with space left between groups of ten
  - d. each word will be given only three times
4. Giving the test
  - a. say the word (i.e. 'meat')
  - b. use the word in a sentence so that its meaning is clear (i.e. "The meat was too raw to eat.")
  - c. say the word again - "meat"
5. Explain you cannot tell them where they went wrong as it is a test
6. Scoring
  - a. keep a running total as you mark each group of ten (i.e. 10 20 26 30 32 36)
  - b. take the raw score (the total number of words spelt correctly) divide by 10 and add 5  
i.e.  $36 + 5 \text{ years} = 8.6 = 8.7$  (converted to twelfths)  
10  
anything over a whole year must be converted to twelfths
  - c. write correct word besides word they have wrong.

### Conversion Table Tenths Twelfths

[1	1
2	2
3	4
4	5
5	6
6	7
7	8
8	10
9	11]

## Appendix G: Scheme of work

**Monday**

**S      phonic lesson 1**

<p><b><u>Revision of all letter sounds (Flash cards)</u></b> There is no revision for this lesson</p>	
<p><b><u>1. Learning the letter sound</u></b></p> <ul style="list-style-type: none"> <li>- Tell the children the story about the snake</li> <li>- Tell the children that the sound of today's letter is sss, like the sound of the snake.</li> <li>- Teach the action of the ssssss letter.</li> <li>- Teach the thumbs up thumbs down game</li> </ul>	
<p><b><u>2. Letter Formation (writing in the air)</u></b></p> <ul style="list-style-type: none"> <li>- Show the children the big letter "s" on the story page and show them how to write this letter. Start from a point round a bit( like curly 'c') and back again.</li> <li>- Write the letter on the board making its sound as you do it.</li> <li>- Children copy you in the air also sounding the letter.</li> <li>- Correct the children if needed.</li> </ul>	<p><b><u>3. Blending</u></b> <b>(Flash Cards: Phoneme Fingers: Play acting actions)</b></p> <ul style="list-style-type: none"> <li>- Show the Flash card for the letter "s"</li> <li>- The children say the sound and do the action for this letter. There is nothing to blend yet, so don't</li> </ul>
<p><b><u>4. Reading</u></b> Read the sound s</p>	<p><b><u>5. Writing</u></b> Children practice writing "s" in their workbooks and note books.</p>
<p><b><u>6. Ending the lesson</u></b></p> <ul style="list-style-type: none"> <li>- Put up the simple sound chart and get the children to point to the letter learnt today.</li> </ul>	

## Tuesday

### a phonic lesson 2

<b>Revision of all letter sounds (Flash cards)</b> Revise - s	
<b><u>Learning the letter sound</u></b> <ul style="list-style-type: none"><li>- Tell the children the story about the ants</li><li>- Tell the children that the sound of today's letter is aaa, like the sound of the girl seeing the crawling ants on her arm.</li><li>- Teach the action of the, a, a, a, letter.</li><li>- Point to some of the pictures in the story and state the names of the objects. Tell the children that this letter is a <b>vowel</b> letter.</li><li>- Do the thumbs up thumbs down game for words that start with the 'a' sound</li></ul>	
<b><u>2. Letter Formation in the air</u></b> <ul style="list-style-type: none"><li>- Show the children the big letter "a" on the story page and show them how to write this letter. Start at a point round down with a flick. .</li><li>- Write the letter on the board making its sound as you do it.</li><li>- Children copy you in the air, table and friends back also sounding the letter.</li><li>- Correct the children if needed.</li></ul>	<b><u>3. Blending</u></b> <b>(Flash Cards: Phoneme Fingers: Play acting actions)</b> <ul style="list-style-type: none"><li>- Show the Flash card for the letter "a"</li><li>- The children say the sound and do the action for this letter.</li><li>- Revise letter "s" – sound and action</li><li>- show the children that something special can happen by putting the sounds together and that you can make a word. Put the "a" and the "s" together and make the word 'as' show how to blend.<ul style="list-style-type: none"><li>- get them to do their first phoneme fingers by holding up 2 fingers and sounding out 'a-s- as' you could also do 's-a sa' this is a nonsense word, but nonsense words show the children can blend</li></ul></li></ul>
<b><u>4. Reading</u></b> <p>Show the children where 'a' is on the sound chart. Get them to read as partners the ditty in the workbook 'a – s as' one partner reads it then the other acting as teachers</p>	<b><u>5. Writing</u></b> <p>Children practice "a" in their workbooks and you may dictate 'a' 's' and 'as' for them to write</p>
<b><u>6. Ending the lesson</u></b> <ul style="list-style-type: none"><li>- let the children point to the letter learnt today on the sound chart.</li></ul>	

# Wednesday

## t phonic lesson 3

<b>Revision of all letter sounds (Flash cards)</b> Revise – s, a	
<b>Learning the letter sound</b> <ul style="list-style-type: none"><li>- Tell the children the story about the game of tennis</li><li>- Tell the children that the sound of today's letter is t, t, t, , like the sound of the ball hitting the tennis rackets in the story.</li><li>- Teach the action of the t, t, t, t, letter.</li><li>- Point to some of the pictures in the story and state the names of the objects.</li><li>- Thumbs up thumbs down game</li></ul>	
<b>2. Letter Formation (writing)</b> ( : Work Book) <ul style="list-style-type: none"><li>- Show the children the big letter "t" on the story page and show them how to write this letter. Start from the top down with a flick and a cross at the top.</li><li>- Write the letter on the board making its sound as you do it.</li><li>- Children copy you in the air, table and friends back also sounding the letter.</li><li>- Correct the children if needed.</li></ul>	<b>3. Blending</b> (Flash Cards: Phoneme Fingers: Play acting actions) <ul style="list-style-type: none"><li>- Show the Flash card for the letter "t"</li><li>- The children say the sound and do the action for this letter.</li><li>- Revise letters "s" and "a" – sound and action</li><li>- Teach the children phoneme fingers.</li><li>- Tell them they can now make words.</li><li>- Show them the word S-A-T on the board</li></ul> The words today are <ul style="list-style-type: none"><li>- sat, at</li></ul>
<b>4. Reading</b> Show the children where 't' is on the chart, revise all of the letter sounds again from the chart. Get the children to read in partners the ditty words for today in their workbooks. Partner 1 followed by partner 2	<b>5. Writing</b> Children open their workbooks and practice the writing "t". Do dictation of sat and at
<b>6. Ending the lesson;</b> <i>let the children point to the sound on the sound chart</i>	

## Thursday

### i phonic lesson 4

<b>Revision of all letter sounds (Flash cards)</b> Revise – s, a, t	
<b><u>Learning the letter sound</u></b> <ul style="list-style-type: none"><li>- Tell the children the story about the mouse</li><li>- Tell the children that the sound of today's letter is i, i, i, like the squeak of the mouse.</li><li>- Teach the action of the i, i, i, letter. Tell the children this is a special letter called a "vowel".</li><li>- Point to some of the pictures in the story and state the names of the objects.</li><li>- Thumbs up thumbs down game</li></ul>	
<b><u>2. Letter Formation</u></b> <ul style="list-style-type: none"><li>- Show the children the big letter "i" on the story page and show them how to write this letter. Start from the top down with a flick and a dot at the top</li><li>- Write the letter on the board making its sound as you do it.</li><li>- Children copy you in the air also sounding the letter.</li><li>- Correct the children if needed.</li></ul>	<b><u>3. Blending</u></b> <b>(Flash Cards: Phoneme Fingers: Play acting actions)</b> <ul style="list-style-type: none"><li>- Show the Flash card for the letter "i"</li><li>- The children say the sound and do the action for this letter.</li><li>- Revise letters "s" "a" "t" – sound and action</li><li>- Teach the children phoneme fingers.</li><li>- Tell then they can now make words.</li></ul> <p>The words today for phoneme fingers and the board are:</p> <ul style="list-style-type: none"><li>- <b>sat, at, sit, sits, it</b></li></ul>
<b><u>4. Reading</u></b> <ul style="list-style-type: none"><li>- The children will read the sounds on the chart and then they will read the ditty words with their partners</li></ul>	<b><u>5. Writing</u></b> <ul style="list-style-type: none"><li>- Turn to workbook 1 and write the 'i' letter</li><li>- Dictate and write – sat, at, sit, sits, it.</li></ul>
<b><u>6. Ending the lesson</u></b> <ul style="list-style-type: none"><li>- let the children point to the letter learnt today on the sound chart.</li></ul>	



## Friday

### p      phonic lesson 5

<b>Revision of all letter sounds (Flash cards)</b> Revise – s, a, t, i	
<b><u>Learning the letter sound</u></b> <ul style="list-style-type: none"><li>- Tell the children the story about the party</li><li>- Tell the children that the sound of today's letter is p, p, p, like blowing out the candles on the cake.</li><li>- Teach the action of the p, p, p, letter.</li><li>- Point to some of the pictures in the story and state the names of the objects.</li><li>- Thumbs up thumbs down game</li></ul>	
<b><u>2. Letter Formation</u></b> <ul style="list-style-type: none"><li>- Show the children the big letter "p" on the story page and show them how to write this letter. Start from the top down a bit and round. Trace the letter with your fingers.</li><li>- Write the letter on the board making its sound as you do it.</li><li>- Children copy you in the air also sounding the letter.</li><li>- Correct the children if needed.</li></ul>	<b><u>3. Blending</u></b> <b>(Flash Cards: Phoneme Fingers: Play acting actions)</b> <ul style="list-style-type: none"><li>- Show the Flash card for the letter "p"</li><li>- The children say the sound and do the action for this letter.</li><li>- Revise letters s, a, t, i, – sound and action</li><li>- Teach the children phoneme fingers.</li><li>- Tell then they can now make more words.</li></ul> <p>The words today for phoneme fingers and the board are:</p> <ul style="list-style-type: none"><li>- <b>sat, at, sit, sits, pit, tap, pits, sip, pat, pats, taps, tip, tips, it</b> (don't do all of them)</li></ul>
<b><u>4. Reading</u></b> <ul style="list-style-type: none"><li>- The children will read the sounds on the chart and then they will read the ditty words with their partners</li></ul>	<b><u>5. Writing</u></b> <ul style="list-style-type: none"><li>- Turn to workbook 1 and write the 'p' letter</li><li>- Dictate and write – pat, pats, pit, tip, tips</li></ul>
<b><u>6. Ending the lesson .</u></b> <ul style="list-style-type: none"><li>- let the children point to the letter learnt today on the sound chart.</li></ul>	

## Monday

### n      phonic lesson 6

<b><u>Revision of all letter sounds (Flash cards)</u></b> Revise – s, a, t, i, p	
<b><u>Learning the letter sound</u></b> <ul style="list-style-type: none"><li>- Tell the children the story about the airplane</li><li>- Tell the children that the sound of today's letter is n, n, n, like the sound of the airplane in the story.</li><li>- Teach the action of the n, n, n, letter.</li><li>- Point to some of the pictures in the story and state the names of the objects.</li><li>- Thumbs up thumbs down game</li></ul>	
<b><u>2. Letter Formation</u></b> <ul style="list-style-type: none"><li>- Show the children the big letter "n" on the story page and show them how to write this letter. Start from the top down up again over the bridge with a flick. Trace the letter with your fingers.</li><li>- Write the letter on the board making its sound as you do it.</li><li>- Children copy you in the air also sounding the letter.</li><li>- Correct the children if needed.</li></ul>	<b><u>3. Blending</u></b> <b>(Flash Cards: Phoneme Fingers: Play acting actions)</b> <ul style="list-style-type: none"><li>- Show the Flash card for the letter "n"</li><li>- The children say the sound and do the action for this letter.</li><li>- Revise letters s, a, t, i, p – sound and action</li><li>- Teach the children phoneme fingers.</li><li>- Tell then they can now make more words.</li></ul> The words today for phoneme fingers and the board are: <b>nip, pin, pan, pans, pins, nips, it, pan, snap, ant</b>
<b><u>4. Reading</u></b> <b>The children read the sounds from the chart and then the ditties in the workbook</b>	<b><u>5. Writing</u></b> Dictation with some of the words above plus writing today's sound.
<b><u>6. Ending the lesson</u></b> <ul style="list-style-type: none"><li>- let the children point to the letter learnt today on the sound chart.</li></ul>	

Tell the children they have finished the first book and show them the words at the back on the flowers. Spell them out together, dictate and phoneme fingers if desired.

## Appendix H: Pupil Questionnaire

### About your Family

1. What is the first language spoken at your home?

- 1) Ibani
- 2) Igbo
- 3) *Obolo (andoni)*
- 4) *Ibibio*
- 5) *Yoruba*
- 6) *Pidgin*
- 7) Ogoni
- 8) Hausa
- 9) English
- 10) Others

About the child's mother and father

2 What work does your father do?

3. What work does your mother do?

### Private tuition

25a. Do you take (private lessons) you have to pay for after school?

- 1) Yes
- 2) No

1.	<p>What language does your mother read or write in [ ] ?  <b>[Multiple Responses Permitted]</b></p>	<p>0=None/Cannot Read  1=English  2=Ibani  3=Igbo  4=Yoruba  5=Hausa  6=Others <b>[Specify]</b> _____</p>
2.	<p>What language does your father read or write in [ ] ?  <b>[Multiple Responses Permitted]</b></p>	<p>0=None/Cannot Read  ] _____ English  2=Ibani  3=Igbo  4=Yoruba  5=Hausa  6=Others <b>[Specify]</b>  _____</p>
3.	<p>Did you attend any form of education before starting Grade 1?  If YES, what kind?</p>	<p>0=No    If Yes: 1=Nursery  2=Others <b>[Specify]</b> _____</p>
4.	<p>Do you have any reading books at home?  If Yes, in what language(s)?  <b>[Multiple Responses Permitted]</b></p>	<p>0=No    If Yes: English  2=Ibani  3=Igbo  4=Yoruba  5=Hausa  6=Others <b>[Specify]</b> _____  6=Others <b>[Specify]</b> _____</p>
5.	<p>Does anyone read aloud to you at home?  If Yes, in what language(s) do they read to you?  <b>[Multiple Responses Permitted]</b></p>	<p>0=No    If Yes: 1English  2=Ibani</p>

		3=Igbo 4=Yoruba 5=Hausa 6=Others <b>[Specify]</b> _____
6.	Do you practice reading aloud to someone at home? If Yes, in what language(s) do you read? <b>[Multiple Responses Permitted]</b>	0=None If Yes: 1=English 2=Ibani 3=Igbo 4=Yoruba 5=Hausa 6=Others <b>[Specify]</b> _____

	In your house do you have . . ?	Yes	No
7.	Electricity	1	0
8.	Refrigerator (fridge)	1	0
9.	Television	1	0
10.	Video or DVD Player	1	0
11.	Radio	1	0
12.	Gas or Electric Stove	1	0
13.	Kerosine stove		
14.	Bicycle	1	0
15.	Motorcycle/Okada	1	0
16.	Car	1	0
17.	GSM Phone	1	0

## **Appendix I: Pupil Interview Guide**

Did you enjoy learning phonics?

Do you enjoy the phonics class?

Did you enjoying blending, counting the sounds, dictation?

What do you enjoy best in the phonics class?

Were you able to read before synthetic phonics was introduced to you?

Are you able to read now?

What do you like most in synthetic phonics lesson: songs, revision, games, stories?

Will you like to continue with learning with synthetic phonics in primary 2? Why?

Was phonics difficult? If yes, what was difficult- sound, blending, etc?

## Appendix J: Pre-Intervention FGD

Ice breaker:

Talk about the schools and teaching generally.

1. What method do you use in teaching reading?

Probe: for all methods

Why do you use this method?

How e of would you rate the success rate of pupils in achieving reading ability?

What do you think of the synthetic phonics training you have just received?

Is it relevant?

Probe: How is it relevant? Do you intend to use it to teach the pupils?

Do you think the method will be easy to use in teaching your pupils?

What challenges do you envisage in the course of teaching?

How may you tackle such challenges?

## Appendix K: Post Intervention FGD

Ice breaker:

Talk about the schools and teaching generally.

1. What method do you use in teaching reading?

Probe: for all methods including SP

Why do you use this method?

What method did you use before you were introduced to the SP method?

How does the old method compare with SP?

2. When did you start using the SP method?

3. What are the gains of using the SP method?

- Were there any disadvantages of using the SP method?
- Please tell me about the disadvantages

4. What about the pupils, would you say there are any gains for the pupils?

5. What are the gains?

Were there any disadvantages for the pupils?

Probe: Please tell me about the disadvantages

6. How successful do you think the method has been in helping the pupils learn how to read?

Please explain:

7. What challenges have you had in implementing this method?

Probe: Please explain

8. How can these challenges be tackled?

How did/do you tackle them?

What kind of support did you receive in tackling the challenges?

Who provided the support?

9. Would you recommend the Synthetic Phonics training for other teachers?

Probe: Why?

Probe: Why not?

10. What do you think about having Synthetic Phonics in the national curriculum?

Probe: Why do you think so?

11. Please do you have more suggestions?



## Appendix L: Classroom observation Checklist

S/N	Observation	No	Yes	Comment
1	Does the teacher recap the sound using flash cards?			
2	Does she/he tell the story in an interesting way?			
3	Is the sound correct?			
4	Is the letter Formation correct			
5	Uses Workbook?			
6	Does She/he incorporate games into the lesson?			
7	Whole class participating?			

8	Partner work and group tasks?			
9	Shows purpose			
10	Teacher teaches with passion			
11	Does she/he praise the efforts of the pupils?			
12	Is the pace suitable for the class?			
13	How many words blended			
14	How many sounded?			

Date \_\_\_/\_\_\_/\_\_\_

School \_\_\_\_\_

## Appendix M: Pilot Pupils' letters

long house  
opposite RCCG  
house of God  
- 200

Dear aunt Busola,  
We thank you for all you have ~~done~~ done for  
us. ~~God~~ God bless you and may God also  
bless you and reward you. May the good God  
protect you and your family.

Thank you  
from Clinton Brown

Letter to anti busola

Long house  
opposite RECS  
house of God  
11/8/2010

Dear anti busola.  
we thanks you for what you have  
don for we may our God bless  
you and ~~your~~ <sup>your</sup> family alive  
Amen you are Bless your family are  
bles thanks you Jesus



Rose flower



## **Appendix O: Classroom Observation/Focus Group Transcription Convention**

### **Transcription Conventions**

Adapted from Sert (2011)

(1.8) Numbers enclosed in parentheses indicate a pause. The number represents the number of seconds of duration of the pause, to one decimal place. A pause of less than 0.2 seconds is marked by (.)

[ ] Brackets around portions of utterances show that those portions overlap with a portion of another speaker's utterance.

:: A colon after a vowel or a word is used to show that the sound is extended. The number of colons shows the length of the extension.

(hm, hh) These are onomatopoeic representations of the audible exhalation of air)

? A question mark indicates that there is slightly rising intonation.

. A period indicates that there is slightly falling intonation.

- A dash indicates an abrupt cut off, where the speaker stopped speaking suddenly.

↑↓ Up or down arrows are used to indicate that there is sharply rising or falling intonation. The arrow is placed just before the syllable in which the change in intonation occurs.

Under Underlines indicate speaker emphasis on the underlined portion of the word.

**CAPS** Capital letters indicate that the speaker spoke the capitalized portion of the utterance at a higher volume than the speaker's normal volume.

°This indicates an utterance that is much softer than the normal speech of the speaker. This symbol will appear at the beginning and at the end of the utterance in question.

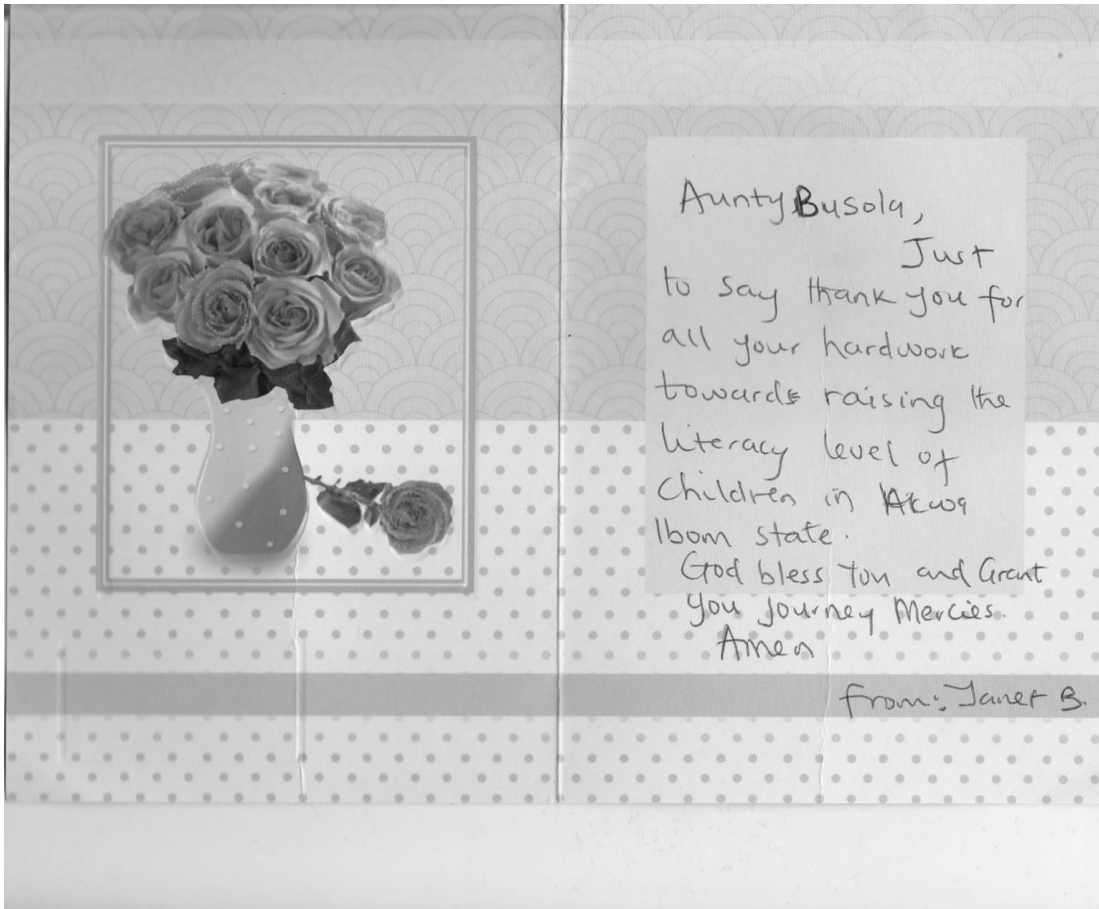
(would) When a word appears in parentheses, it indicates that the transcriber has guessed as to what was said, because it was indecipherable on the tape. If the transcriber was unable to guess what was said, nothing appears within the parentheses.

£C'mon£ Sterling signs are used to indicate a smiley or jokey voice.

+ marks the onset of a non-verbal action (e.g. shift of gaze, pointing)

*italics* English translation

## Appendix P: Thank You Card



## Appendix Q: Consent Form

CONSENT FORM

SCHOOL OF EDUCATION, COMMUNICATION AND LANGUAGE SCIENCE, NEWCASTLE UNIVERSITY . UK

**Consent Form**

1. I ..... GR ..... SCHOOL  
BONNY .....

Hereby consent to participate in a research project titled: Study Synthetic Phonics as a tool for improving the reading skill of Nigerian Pupils

2. I have read and understood the information letter for the study and have had the aims and nature of the study explained to my satisfaction. I therefore freely give my consent to take part in the study.

3. I understand that I will be required to attend a teacher training course, teach synthetic phonics to my pupils, have my class observed, and participate in focus group discussions with other teachers participating in the study to share our experiences as observed in the progress of our pupils.

4. I understand that a recording device will be used by the researcher during the research.

5. I understand that all information provided by me will be kept confidentially and only the researcher can trace this information back to me, as my identity will not be used in the study. I also understand that all data from the study will be stored in a locked office at the Newcastle University and/or in a pass worded computer which is only accessible to the researcher. I understand that I can ask for the information I provide to be deleted/destroyed at anytime up until the data has been anonymised.

6. I understand that I am free at anytime to contact the researcher for any information related to the study. I am also free to withdraw from the discussion at any stage if I wish to.

Signed..... [Signature] ..... Date..... 21/4/2011 .....



## **Appendix W: Parent Opt-Out form**

25/09/2010

Dear Parent/Guardian,

### **Study in your Child's class**

My name is Olubusola I. Eshiet. I am a research student currently investigating the effect of synthetic phonics teaching on the reading skills of pupils.

I will be carrying out some study in your child's class. The study includes:

1. Pre and post-test of pupils
2. Observing the teaching procedure
3. Interviewing pupils
4. Completion of pupil background questionnaire

In the course of the study, I will use a video recorder to capture some classroom moments. Audio, video, and test information collected from the class and the pupils will be presented in my thesis, and may also be used in other publications- printed and online. You do not have to agree to your child/ward/self being recorded. If you do not want the camera to focus on your child, please inform the teacher in advance. Your child will not be affected or prejudiced if you request this. You may, if you wish, view the tape recording.

If you do NOT want your child to participate in this study, kindly sign and return this form to your child's class teacher. Your child will not be at any disadvantage if they do not participate.

If you have any question, kindly contact me on 08055090030 or +447733830711.

Yours Truly,

Olubusola I. Eshiet

## Appendix X: School Visit Record

---

Schools	Date Visited				
	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5
1	14-Oct-10	12-Nov-10	17-Jan-11	14-Feb-11	11-Mar-11
2	11-Oct-10	11-Nov-10	21-Jan-11	18-Feb-11	08-Mar-11
3	12-Oct-10	10-Nov-10	18-Jan-11	15-Feb-11	10-Mar-11
4	15-Oct-10	08-Nov-10	20-Jan-11	17-Feb-11	09-Mar-11
5	13-Oct-10	09-Nov-10	19-Jan-11	16-Feb-11	07-Mar-11

---

Focus Group Discussion	
Discussion 1	15-Sep-10
Discussion 2	21-Apr-11

---