

**COMPUTER ASSISTED LANGUAGE LEARNING AND IMPACT ON
MOTIVATION AND ACHIEVEMENT IN IGBO AMONG JUNIOR
SECONDARY SCHOOL STUDENTS IN LAGOS STATE, NIGERIA.**

BY

OKUDO, AFOMA ROSEFELICIA

MATRIC NO: 980307002

JANUARY, 2016

**COMPUTER ASSISTED LANGUAGE LEARNING AND IMPACT ON
MOTIVATION AND ACHIEVEMENT IN IGBO AMONG JUNIOR
SECONDARY SCHOOL STUDENTS IN LAGOS STATE, NIGERIA.**

BY

OKUDO, AFOMA ROSEFELICIA

B.A.Ed, M.Ed, University of Lagos, Akoka

**A THESIS SUBMITTED TO THE DEPARTMENT OF ARTS AND SOCIAL SCIENCES
EDUCATION, SCHOOL OF POSTGRADUATE STUDIES, UNIVERSITY OF LAGOS,
AKOKA-YABA, LAGOS, NIGERIA**

**IN PARTIAL FULFILMENT OF THE AWARD OF THE DEGREE OF DOCTOR OF
PHILOSOPHY IN EDUCATION IGBO**

JANUARY, 2016

SCHOOL OF POSTGRADUATE STUDIES
UNIVERSITY OF LAGOS

CERTIFICATION

This is to certify that the Thesis:

COMPUTER ASSISTED LANGUAGE LEARNING AND IMPACT ON
MOTIVATION AND ACHIEVEMENT OF JUNIOR SECONDARY SCHOOL
STUDENTS IN IGBO IN LAGOS STATE, NIGERIA

submitted to the
School of Postgraduate Studies
University of Lagos



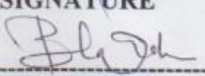

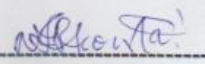
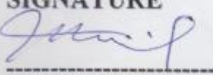
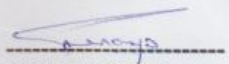
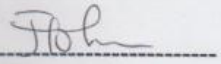
For the award of the degree of
DOCTOR OF PHILOSOPHY (Ph.D.)

is a record of original research carried out

By:

OKUDO, AFOMA ROSEFELICIA

In the Department of Arts & Social Sciences Education

<u>OKUDO, AFOMA R.</u>	<u></u>	<u>12/01/2016</u>
AUTHOR'S NAME	SIGNATURE	DATE
<u>DR A.D ADEGSON</u>	<u></u>	<u>12/01/2016</u>
1 ST SUPERVISOR'S NAME	SIGNATURE	DATE
<u>DR B.F ADEOYE</u>	<u></u>	<u>12/01/2016</u>
2 ND SUPERVISOR'S NAME	SIGNATURE	DATE
<u>PROF C. OHIRIK ANICHE</u>	<u></u>	<u>12/01/16</u>
3 RD SUPERVISOR'S NAME	SIGNATURE	DATE
<u>Dr. N. R. Ikanta</u>	<u></u>	<u>12/01/2016</u>
1 ST INTERNAL EXAMINER	SIGNATURE	DATE
<u>DR. C. B. NNABUITE</u>	<u></u>	<u>12-01-2016</u>
2 ND INTERNAL EXAMINER	SIGNATURE	DATE
<u>Prof E. NOKUE EKENATE</u>	<u></u>	<u>12-01-2016</u>
EXTERNAL EXAMINER	SIGNATURE	DATE
<u>Prof. O. A. Obachaw John</u>	<u></u>	<u>12-1-2016</u>
SPGS REPRESENTATIVE	SIGNATURE	DATE

DEDICATION

To GOD, the LORD Almighty

The Author of life

The Fountain of wisdom

The Pillar of my family life.

To my late father –Vincent Ojukwu - who would have
loved to see his dream accomplished.

To my amiable husband and best friend; Okwudilim
for when GOD made husbands, HE blessed me with
the best, and to my wonderful children: Chukwuebuka,
Chibueze, Chinemerem and Chidera.

And to all who strived; who are striving; and who will strive to promote
and preserve the Igbo language and its cultural heritage.

ACKNOWLEDGMENT

My thanks and profound immeasurable gratitude goes to God Almighty, and also I would like to express my immense gratitude to many important people without whom I would not have been able to complete my dissertation research, and I am happy for having the opportunity to recognize their contributions to this study. I would like to thank and appreciate my supervisors: Prof.(Mrs) C. Ohiri-Aniche, Dr. (Mrs) A.O. Adeosun and Dr. B.F. Adeoye for guiding and encouraging me throughout my academic programme, and their constructive comments and invaluable suggestions to this work.

I am also very grateful for the untiring help and support of Prof.C.C. Opara, Dr. R.O Igwe, Dr. N.R. Ikonta, Dr. A.N. Maduekwe, Dr. A. Adepoju. I owe much to Prof. Virgy Onyene; Prof. Ngozi Osarenren; and Dr. Ngozi Uzoka for their kindness and support on my dissertation. I would like to recognize the contributions of Ify Ifeakpolunde (Adadioramma) and all the staff of Bond 92.9 FM of Federal Radio Corporation of Nigeria, Ikoyi Lagos. I appreciate their incredible expertise and assistance in the area of producing, presenting and recording of the audio sounds of my software package. I also appreciate the invaluable contributions of Ichie Chinedum Ofoata and the entire staff of Format Publishers Nigeria Limited for helping me out with some of the Igbo language monographs, historical books and textbooks. I also appreciate all the teachers and students of the schools I used for this study. Thank you all and remain blessed. To my research assistants- Blessing Emeodi and Uche Okoye, I say a big thank you.

I am thankful for the help and support of my dissertation committee for their wholehearted encouragement and wise advice on my research. I am indeed grateful to Maazi Chika Dike, Dozie Chukwukere, Dr. Olumide Ige, Dr M.I Odo, Dr. Perp Ememe and Dr Ngozi Okafor for their moral support.

Special thanks is due to all the staff of Department of Arts and Social Sciences Education-both academic and non academic- for their tremendous help with my plan of study throughout the entire period of my doctoral programme. I would also like to express my appreciation to all the Igbo language lecturers in the Dept. of Linguistics, African and Asian Languages for their enormous support to this research.

I would like to give special thanks to my family for they are the source of my strength and the love of my life. To my mother: Mrs Appolonia Ojukwu for always being there for me whenever I

need her support, and for her endless love and support throughout the years. To my siblings: Ogee, Chizoo, Nwamaa, Uchee and Oruu for their love and great assistance. I could not have completed my dissertation without the wonderful support from all of you.

My deepest gratitude belongs to my darling husband – Chief Okwudilim Austin Okudo (Ichie Agbalanze) who has always loved me, believed in me, supported me, and had been there for me to help me overcome many challenges in my life, for without whom I would not have been able to complete my dissertation. He is the meaning of my life and the source of my happiness now and forever. I am truly grateful for his assistance and that of our lovely beloved children- Chukwuebuka, Chibueze, Chinemerem and Chidera. Thank you all for your prayers, support, understanding and encouragement. To my husband brothers-Chief Cyprain Obinwanne Okudo, Mr Edwin Okudo, Mr Uche Okudo and their families, I say may God bless you all for your support.

To all my friends-Dr Christy Omotuyuole, Dr. Nkechi Moji Manuel, Orunna Blessed, Mrs Ojo, Dr. Gladys Emiola, Ebere Ezeudegbunam, Jennifer Ughellu and others too numerous to mention,-I say a big thank you for your concern, support and prayers.

TABLE OF CONTENTS

Contents	Page
Title Page	i
Certification	ii
Dedication	iii
Acknowledgements	v
Table of Contents	vii
List of Tables	xiv
List of Figures	xv
List of Screenshots .	xvi
List of Appendices	xvii
Abstract	xviii

CHAPTER ONE:

INTRODUCTION

1.1 Background to the Study	1
1.2 Statement of Problem	9
1.3 Theoretical Framework	10
1.4 Purpose of the Study	17
1.5 Research Questions	18
1.6 Research Hypotheses	19
1.7 Significance of the Study	19

1.8 Scope of the Study and Delimitation	21
1.9 Operational Definitions of Terms	21
CHAPTER TWO:	LITERATURE REVIEW
2.0 Preamble	24
2.1 Constructivist Theory in Teaching and Learning	25
2.1.1 Constructivism View of Using Technology in the Classroom	26
2.2 Motivation and Language Learning	27
2.2.1 The Impact of Motivation on Student Achievement	31
2.3 Language and Identity Loss	32
2.4 The Igbo People	34
2.4.1 Status of the Igbo Language	35
2.4.2 Students' Perception and Motivation to learn the Igbo Language	38
2.5 Academic Achievement	40
2.6 Nigeria's Language Policy and Implementation	41
2.7 Teaching Strategies for Classroom Instruction	44
2.7.1 Teaching Strategies and Academic Achievement	48
2.8 Information and Communication Technology and Nigerian Educational System Context	49
2.8.1 Role of ICT and Changing Nature of Pedagogy	51
2.9 Concept of Computer Literacy and Competency (ICTs Skills Competence)	55
2.10 Computer Assisted – Language Learning (CALL)	58
2.10.1 Theory and Application of CALL	60
2.10.2 The Use of CALL for Teaching Language Skills	65

2.10.3	CALL and Listening skill	65
2.10.4	CALL and Speaking Skills	66
2.10.5	CALL and Writing Skill	67
2.11	Impact of CALL on Language Teaching and Learning	67
2.12	Relationship between CALL Programmes and Language Learning Education	68
2.13	Teacher Preparation for and use of CALL	69
2.13.1	Teachers' Barriers to the Use of Computer-Assisted Language Learning	71
2.13.2	Advantages and Disadvantages of CALL in Language Learning	74
2.14	Research studies on Computer-Assisted Language Learning (CALL)	81
2.15	Summary of the Literature Review	87

CHAPTER THREE: METHODOLOGY

3.0	Preamble	
3.1	Research Design	90
3.2	Population for the Study	93
3.3	Sample and Sampling Technique	93
3.4	Rationale for Sample Selected	95
3.5	Research Instruments	95
3.6	Development and Utilization of the Igbo Language Learning Multimedia Package (ILLMuPac)	98
3.7	The ASSURE Model (Heinich, Molenda & Russel, 1999)	100
3.8	Validity of the Research Instruments	103

3.9 Reliability of the Research Instruments	104
3.10 Data Collection Procedures	105
3.11 Administration of the Instruments	106
3.12 The Intervention	106
3.13 Development of an Interactive Model of Igbo Language Teaching and Learning	108
3.14 Screenshots of the Application	108
3.15 How to Use the Intervention Package	110
3.16 Igbo Language Achievement Intervention Test (ILAT)	110
3.17 Analysis of Igbo Language Achievement Test	111
3.18 The Pilot Study	111
3.18.1 Summary of Findings from the Pilot Study	112
3.18.2 Gains from the Pilot Study	113
3.19 Data Analysis Techniques	113

CHAPTER FOUR: RESULTS AND PRESENTATION OF DATA

4.0 Preamble	114
4.1 Presentation of Data and Results	114
4.2 Discussion of Findings	126
4.3 Implications for Language Teaching and Learning	136

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Preamble	
Summary	137
Contributions to Knowledge	142
Recommendations based on the Findings	143
Conclusions	144
Limitation of the Study	145
Suggestions for Further Research	145
References	146
Appendices	178
Developed Igbo CALL Software	218

LIST OF TABLES

Table 1: Pretest – Posttest Control group design	94
Table 2: Variables for the Study	95
Table 3: The Study in Phases	96
Table 4: Sampling Distribution	98
Table 5: Table of Reliability of the Instruments	109
Table 6: Pre and post motivation scores of the experimental and control groups	121
Table 7: Pre and post achievement scores of the experimental and control groups	123
Table 8: Pre and post reading and writing skills achievement scores of experimental and control groups	126
Table 9: Summary of ANCOVA on the effect of the CALL intervention package and students' language of the home on academic achievement in Igbo	129
Table 10: Frequency distributions of Igbo instructional strategies in junior secondary schools	130
Table 11: Frequency distribution of ICT competency level of the Igbo language teachers	131

LIST OF FIGURES

Figure 1: Pre and posttests Igbo motivation test scores of students in the experimental and control groups	120
Figure 2: Pre and Posttests Igbo achievement test scores of students in the experimental and control groups.	122
Figure 3: Pre and post Reading and Writing achievement scores of experimental and control groups	125
Figure 4: Technology-Enhanced Approach to Igbo language teaching and learning	138

LIST OF SCREENSHOTS

Screenshot 1: Login Interface	223
Screenshot 2: Select activity Interface	223
Screenshot 3a: Learning activity Interface	224
Screenshot 3b: Learning activity Interface	225
Screenshot 4: Test activity Interface	226
Screenshot 4b: Test activity Interface	226
Screenshot 4c: Test activity Interface	227
Screenshot 5a:Correction/Feedback Interface	228
Screenshot 5b:Correction/Feedback Interface	228

APPENDICES

Appendix 1: Questionnaire for the Igbo Language Teachers

- a) Teachers' Basic Computer Skills Assessment Questionnaire
- b) Teachers' Igbo Language Instructional Strategies Questionnaire

Appendix 2: Questionnaire for Students Learning the Igbo Language

- a) Student's Motivation to Learn the Igbo Inventory
- b) Teaching Techniques Used For Instructions In the Igbo Language Classroom

Appendix 3: Students' Igbo Language Learning Multimedia Package Assessment Questionnaire

Appendix 4a: The Igbo Language Achievement Test (Pre- Test)

Appendix 4b: The Igbo Language Achievement Test (Post- Test)

Appendix 5: Scripts for the Study

Appendix 6: Selected Frames from Interactive Multimedia Package

SOFTWARE PACKAGE

Developed Igbo CALL Software Package named Igbo Language

Learning Multimedia Package (ILLMuPac)

ABSTRACT

The Igbo language is one of the three major Nigerian languages, and one of the three recognized Nigerian indigenous languages known as the WAZOBIA. Therefore, it is important for the Igbo language to receive much needed acclamation and acceptance in the technology driven era across the globe, in Nigeria and among the Igbo in particular. Technological innovation and the advancement of new language teaching pedagogies culminating in the Computer Assisted Language Learning (CALL) have had tremendous impact on the teaching and learning of languages, beyond the English language. To make learning of the Igbo language enjoyable, productive and effective, it is necessary to benefit from the opportunity that technology provides us with. Therefore, the CALL in teaching of Igbo is imperative for it to maintain pace with global changes. The study developed a CALL intervention package named ILLMuPac which was utilized to determine the impact of the CALL on the teaching and learning of the Igbo language by assessing the effect of the CALL package on junior secondary school (JSS) students' motivation to learning of, and achievement in Igbo. Adopting a descriptive survey as well as a quasi-experimental research design, the study raised six research questions and tested four hypotheses which were answered using data collected from 20 Igbo language teachers as well as 249 JSS students. Several instruments comprising Pre- and Post Igbo Language Achievement Tests; Students' Motivation to learn the Igbo Language Inventory; Prevalent Instructional Strategies Questionnaire; Teachers' Computer Skills Assessment Questionnaire; and the Igbo Language Learning Multimedia Package (ILLMuPac) were also used. The data were analyzed using frequencies, percentages, mean and standard deviation while statistical

significance of 0.05 level was determined through t-test and Analysis of Covariance (ANCOVA). The findings showed a significant effect of the ILLMuPac on students' motivation to learn, and on their achievement in the Igbo language. A significant improvement in the reading and writing skills of the students as a result of the intervention package, and a poor ICT skills competence of the Igbo teachers were also noted. The result also showed that conventional method and individualized method of instruction ranked high as the prevalent instructional strategies adopted by the Igbo language teachers in teaching Igbo in junior secondary schools. Based on the findings, the study recommends among other things that the Igbo language teachers should be trained in the use of CALL application packages for classroom instruction through workshops, seminars and induction courses; and also that the Igbo language teachers should vary their methods, techniques and ways of teaching according to their students' capabilities and interests.

Keywords: Computer Assisted Language Learning; conventional instructional method; the Igbo language; achievement; motivation