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**THE EFFECT OF COMPUTER ASSISTED LANGUAGE LEARNING  
(CALL) ON ENGLISH LANGUAGE LEARNERS' PRONUNCIATION  
IN SECONDARY SCHOOL IN PAKISTAN**

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## Abstract

Pronunciation is a central component of speaking module in second language learning. However, it has always been neglected in the traditional second language learning classrooms. Mispronunciation impedes the communicative competence to a greater level. Pronunciation through computer-assisted language learning provides many advantages regarding improving phonemic sounds. The study aimed at evaluating the effectiveness of CALL to teach the segmental features of pronunciation: monophthongs, diphthongs and consonant sounds. An experimental study was designed in which 70 participants were selected from a public high school of Hasilpur Pakistan. The participants were divided into two groups: Experimental Group 1 and Experimental Group 2. A pronunciation test was utilized for pretest and posttest, consisting of 44 phonemic sounds. The duration of the treatment was six weeks in 46 sessions. Experimental Group 1 was taught phonemic sounds in a computer lab by showing phonetic videos and listening the different IPA sounds and symbols through Cambridge Advanced Learners' Dictionary. Experimental Group 2 was taught the same material by teaching pronunciation without CALL. The mean scores of the pretests and posttests were analysed through SPSS using independent samples t-test to see the difference between the mean scores of both groups. The findings of the quantitative data showed that the group that received the treatment of phonetic videos and digital dictionary via computer performed better in learning the phonemic sounds than the group that received the treatment of pronunciation teaching without CALL. The current research is beneficial in promoting pronunciation teaching using CALL to address the segmental issues of pronunciation in Pakistan.

**Keywords:** Pronunciation, CALL, Phonetic videos, Vowels, Consonants

## Abstrak

Sebutan adalah komponen utama modul pertuturan dalam pembelajaran bahasa kedua. Bagaimanapun, sebutan selalu diabaikan dalam bilik darjah pembelajaran bahasa tradisional yang kedua. Kesilapan sebutan menghalang kecekapan komunikatif pada tahap yang lebih tinggi. Sebutan melalui pembelajaran bahasa berbantuan komputer memberikan kelebihan yang besar mengenai peningkatan bunyi fonemik. Kajian ini bertujuan untuk menilai keberkesanan program CALL untuk mengajar ciri-ciri segmen Sebutan: monophthongs, diphthong dan bunyi konsonan. Satu kajian eksperimental dibentuk di mana yang terdiri daripada 70 orang peserta daripada sekolah dari menengah awam Hasilpur Pakistan telah dipilih. Yang peserta dibahagikan kepada dua kumpulan: Kumpulan Eksperimen 1 dan Kumpulan Eksperimen 2. Ujian sebutan digunakan untuk pra-ujian dan pasca-ujian, yang terdiri daripada 44 bunyi fonemik. Tempoh kajian ialah 6 minggu dalam 46 sesi. Kumpulan Eksperimen 1 diajar bunyi fonemik di makmal komputer dengan menggunakan video-video fonetik dan mendengar bunyi dan simbol IPA yang berlainan menerusi Kamus Cambridge Advanced Learners. Kumpulan Eksperimen 2 diajar bahan yang sama menggunakan dengan mengajar sebutan tanpa CALL. Skor min bagi pra-ujian dan pasca-ujian dianalisis melalui SPSS dengan menggunakan sampel bebas ujian-t untuk melihat perbezaan di antara skor min kedua-dua kumpulan. Penemuan data kuantitatif menunjukkan bahawa kumpulan yang diajar menerusi video-video fonetik dan kamus digital menggunakan komputer melaksanakan dengan lebih baik dalam mempelajari bunyi fonemik berbanding kumpulan yang menerima rangsangan pengajaran sebutan menerusi tanpa CALL. Kajian semasa ialah/adalah bermanfaat untuk menggalakkan pengajaran sebutan menggunakan CALL untuk menangani masalah segmen sebutan di Pakistan.

**Kata kunci:** Sebutan, CALL, video Fonetik, Vokal, Konsonan

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# CHAPTER ONE

## INTRODUCTION

This chapter discusses background of the thesis, followed by the statement of the research problem, objectives, research questions, hypotheses of the study. The chapter also entails conceptual framework, significant of the research, operational definition of the variables and major terms along with summary of the chapter.

### 1.1 Background of the Study

Pronunciation is a key aspect in any language and plays a vital role especially regarding learning and teaching of learners' communicative competence. Pronunciation has is more imperative than vocabulary and grammar (Harmer, 2001). Good Pronunciation may facilitate a learner by making communication easier, relaxed as well as more successful (Varasarin, 2007; Dan, 2006). While, Miller (2004) highlights that pronunciation affects someone's self-esteem and level confidence to utter understandable speech.

Pronunciation has always been ignored throughout the language learning process (Gilner, 2008; Baker & Murphy, 2011; Derwing, 2010). However, in Pakistani context it has always been ignored throughout the language learning process and it is considered that pronunciation is learnt through the other skills of the language instead of paying attention on oral skill (Mansoor, 2005). It is also ignored throughout the world no attention is paid to develop this skill in language learning classroom (Gilner, 2008; Baker & Murphy, 2011; Derwing, 2010). It has become 'Marginalized Topic' as well as it is considered "an



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## Appendices

### Appendix A

#### International Phonemic Alphabets (IPA)

Vowel sounds (20 sounds)

Single vowel sounds (12 sounds)

/i:/	/ɪ/	/ʊ/	/u:/
/e/	/ə/	/ɜ:/	/ɔ:/
/æ/	/ʌ/	/ɑ:/	/ɒ/

Diphthongs (8 sounds)

/ɪə/	/eɪ/	/ʊə/	/ɔɪ/
/əʊ/	/aɪ/	/eə/	/aʊ/

Consonant Sounds (24 sounds)

/p/	/b/	/t/	/d/
/tʃ/	/dʒ/	/k/	/g/
/f/	/v/	/θ/	/ð/

/ s /	/ z /	/ ʃ /	/ ʒ /
/ m /	/ n /	/ ŋ /	/ h /
/ l /	/ r /	/ w /	/ j /



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## Appendix B

### Likert Scale 1-9 Points for Pretest Pronunciation Assessment

- |                             |  |
|-----------------------------|--|
| 1= Extremely Incorrect (VI) | 2=Very Incorrect (VI)                  |
| 3=Moderately Incorrect (MI) | 4=Neither Incorrect nor Correct (NINC) |
| 5=Slightly Correct (SC)     | 6=Moderately Correct (MC)              |
| 7=Slightly Incorrect (SI)   | 8=Very Correct (VC)                    |
| 9=Extremely Correct (EC)    |  |

### Material Used for Pretest

Words	Sounds	EI	VI	MI	SI	NINC	SC	MC	VC	EC
Me	/i:/									
Look	/ʊ/									
Up	/ʌ/									
On	/ɒ/									
uh	/ə/									
ten	/e/									
hat	/æ/									
Shoe	/u:/									
Arm	/ɑ/									
saw	/ɔ:/									
Turn	/ɜ:/									

<b>In</b>	<i>/i:/</i>								
<b>Ear</b>	<i>/ɪə/</i>								
<b>Poor</b>	<i>/ʊə/</i>								
<b>Eye</b>	<i>/aɪ/</i>								
<b>Noise</b>	<i>/ɔɪ/</i>								
<b>Nose</b>	<i>/əʊ/</i>								
<b>Hair</b>	<i>/eə/</i>								
<b>Ow</b>	<i>/aʊ/</i>								
<b>Pay</b>	<i>/eɪ/</i>								
<b>Pop</b>	<i>/p/</i>								
<b>Two</b>	<i>/t/</i>								
<b>Church</b>	<i>/tʃ/</i>								
<b>Cake</b>	<i>/k/</i>								
<b>Fan</b>	<i>/f/</i>								
<b>Three</b>	<i>/θ/</i>								
<b>Six</b>	<i>/s/</i>								
<b>Shoe</b>	<i>/ʃ/</i>								
<b>Bus</b>	<i>/b/</i>								
<b>Dog</b>	<i>/d/</i>								

<b>Jam</b>	<b>/dʒ/</b>									
<b>Good</b>	<b>/g/</b>									
<b>Very</b>	<b>/v/</b>									
<b>The</b>	<b>/ð/</b>									
<b>Zoo</b>	<b>/z/</b>									
<b>Pleasure</b>	<b>/ʒ/</b>									
<b>Man</b>	<b>/m/</b>									
<b>Nine</b>	<b>/n/</b>									
<b>Wing</b>	<b>/ŋ/</b>									
<b>Happy</b>	<b>/h/</b>									
<b>Like</b>	<b>/l/</b>									
<b>Red</b>	<b>/r/</b>									
<b>Wind</b>	<b>/w/</b>									
<b>Yes</b>	<b>/j/</b>									

## Appendix C

### Likert Scale 1-9 Points for Posttest Pronunciation Assessment

Words	Sounds	EI	VI	MI	SI	NINC	SC	MC	VC	EC
Read	/i:/									
Mill	/i/									
Shook	/o/									
Rule	/u:/									
Pen	/e/									
Teacher	(ə)									
Turn	/ɜ:/									
Saw	/ɔ:/									
Jug	/ʌ/									
Bat	/æ/									
Arm	/ɑ:/									
On	/ɒ/									
Germs	/dʒ/									
Year	/ɪə/									
Hour	/ʊə/									
Chair	/eə/									
Pay	/eɪ/									

<b>Boy</b>	/ɔɪ/								
<b>Eye</b>	/aɪ/								
<b>Go</b>	/əʊ/								
<b>How</b>	/aʊ/								
<b>Pay</b>	/eɪ/								
<b>Pop</b>	/p/								
<b>Teeth</b>	/t/								
<b>Church</b>	/tʃ/								
<b>Cake</b>	/k/								
<b>Feather</b>	/f/								
<b>Thorn</b>	/θ/								
<b>Salt</b>	/s/								
<b>Shoe</b>	/ʃ/								
<b>Bug</b>	/b/								
<b>Dad</b>	/d/								
<b>Good</b>	/g/								
<b>Vowel</b>	/v/								
<b>Than</b>	/ð/								
<b>Busy</b>	/z/								
<b>Pleasure</b>	/ʒ/								

<b>Man</b>	<b>/m/</b>									
<b>Knees</b>	<b>/n/</b>									
<b>Sing</b>	<b>/ŋ/</b>									
<b>Happy</b>	<b>/h/</b>									
<b>Leaf</b>	<b>/l/</b>									
<b>Red</b>	<b>/r/</b>									
<b>Warm</b>	<b>/w/</b>									
<b>Yard</b>	<b>/J/</b>									



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## Appendix D

### Pilot Testing for Reliability

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Me	141.85	203.713	.488	.715
Look	141.85	203.713	.488	.715
UP	141.35	224.345	.044	.740
On	142.75	218.513	.240	.730
Uh	142.95	233.839	-.270	.747
Ten	143.10	221.253	.200	.732
Hat	143.15	225.292	.092	.736
Shoe	142.80	227.747	-.032	.742
Arm	143.05	205.418	.684	.711
Saw	142.70	214.432	.273	.728
Turn	142.40	212.989	.271	.728
In	142.10	204.411	.441	.717
Ear	143.25	223.671	.146	.734
Poor	142.55	209.734	.491	.718
Eye	142.85	219.503	.225	.731
Noise	143.05	215.945	.475	.724
Nose	143.30	230.326	-.143	.741
Hair	142.75	214.829	.307	.727
Ow	143.95	231.839	-.250	.743
Pay	143.05	224.261	.092	.736
Pop	142.25	202.724	.441	.717
Two	142.85	224.450	.046	.740
Church	143.20	225.747	.033	.739
Cake	142.55	221.208	.230	.731
Fan	143.35	222.766	.143	.734
Three	143.00	242.737	-.369	.763
Six	143.15	221.713	.207	.732
Tissue	143.25	216.618	.331	.727
Bus	142.95	230.576	-.108	.749
Dog	142.80	217.326	.204	.732

Jam	142.80	235.642	-.233	.753
Good	143.05	217.839	.218	.731
Very	143.05	220.471	.222	.731
The	142.65	216.029	.212	.732
Zoo	142.80	204.379	.527	.714
Pleasure	143.65	227.397	.011	.738
Man	142.85	216.345	.294	.728
Nine	142.65	214.555	.315	.726
Wing	143.60	215.516	.369	.725
Happy	143.35	220.766	.228	.731
Like	143.35	218.029	.272	.729
Red	142.70	211.695	.330	.725
Wind	143.40	215.832	.319	.727
Yes	142.55	212.050	.324	.725

**Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
146.20	227.958	15.098	44

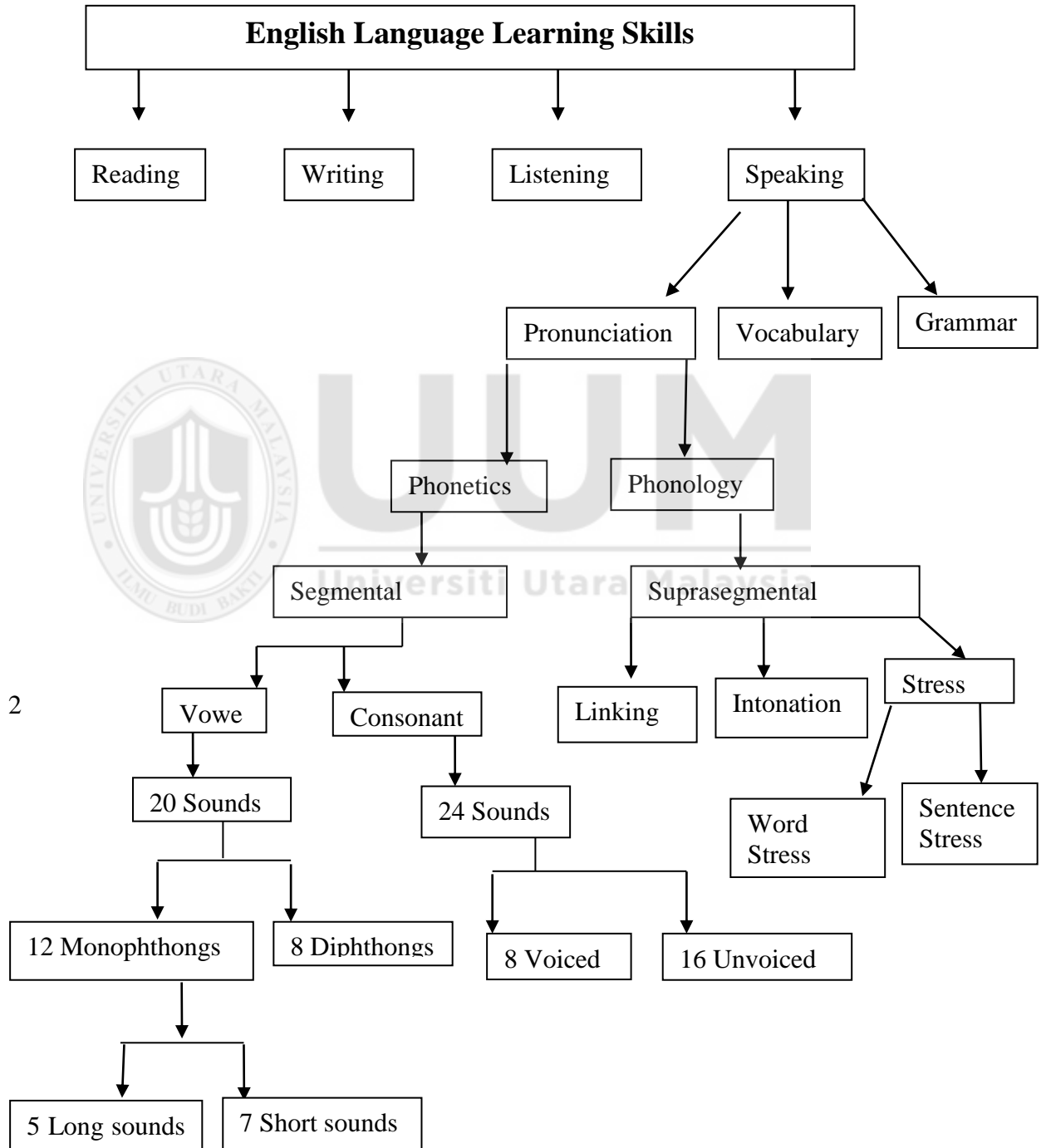
**Reliability Coefficient**

**No of Students=20**

**Alph-.736**

## Appendix E

### Introductory Lecture on Pronunciation Skill



**Appendix F**  
**CONSENT FORM**

**TITILE**

The Effect of Computer Assisted Language Learning (CALL) on English Language Learners' Pronunciation in Secondary School in Pakistan.

**Supervisor:** Prof. Madya Dr. Hisham B. Dzakikria  
**Student Researcher:** Perveen Akhter Farhat  
**Degree Studying:** Ph.D in Applied Linguistics  
**Institution:** University Utara Malaysia, Sintok, 06010, Kedah Malaysia.  
**Name of the School** Government Girls High School Hasilpure (old), District Bahawalpur, Punjab, Pakistan  
**Participant Class:** 10<sup>th</sup> Graders (Females)  
**Commencing Date:** 15<sup>th</sup> December 2016  
**Completion Date:** 30<sup>th</sup> January 2017

**Ethical Concerns:** The names of the students will not be disclosed to anyone throughout the research program except the Student Researcher (herself) and Research Supervisor. The findings of the research may be published in journals during this research or after the completion of the research. However, the names of the students neither will be used in any of the research publications nor in the final submission of the thesis. All written work, recordings, and videos (taken in Pretest, Posttest& treatment) will be destroyed after the completion of this research and will not be employed anywhere else following this program.

I will be very thankful to you for this act of kindness, cooperation and fully supported environment regarding my research.

**Student Researcher:** Perveen Akhter Farhat \_\_\_\_\_

SIGNATURE OF THE PRINCIPAL

DATE

\_\_\_\_\_

\_\_\_\_\_