

**THE EFFECTS OF IMMERSIVE MULTIMEDIA LEARNING
WITH PEER SUPPORT ON VOCABULARY, GRAMMAR,
ENGLISH ORAL SKILLS, AND MOTIVATION**

ASNAWI

UNIVERSITI SAINS MALAYSIA

2015

**THE EFFECTS OF IMMERSIVE MULTIMEDIA LEARNING
WITH PEER SUPPORT ON VOCABULARY, GRAMMAR,
ENGLISH ORAL SKILLS, AND MOTIVATION**

BY

ASNAWI

**Thesis submitted in fulfillment of the requirements for
The degree of Doctor of Philosophy**

February, 2015

ACKNOWLEDGEMENT

I am grateful to many individuals who have helped me at various stages throughout this journey of intellectual pursuit. I would like to thank my main supervisor Professor Dr. Merza Abbas, who has patiently guided and supported me throughout my doctoral study. Thank you, Prof. Merza, for nurturing my thinking about language teaching and learning strategy and literacy research, for providing insightful advice on my dissertation study and other professional decisions, for always looking out for me, and for having more faith in me than I did in myself. You have set up an exceptional role model as a scholar and a thoughtful and caring mentor. I am thus able to achieve the completion of my dissertation and journey. My gratitude to you is beyond words. I will miss you dearly in Aceh, a place where we both share loving memories. Please visit sometime. It would be wonderful to take a walk with you throughout Aceh! I would like to express my gratitude to my co-supervisor Professor Dr. Wan Mohd. Fauzy for his guidance and invaluable inputs during my study at Universiti Sains Malaysia. Thank you Prof. Wan, your support was really helpful.

I would like to extend my heartfelt gratitude for the love and support of my immediate and extended family. I especially thank my beloved parents, *Al-Marhum* Muslem and Ti Angkasyah, who have brought me to this world. Thank you *Mak* and *Ayah* for your unconditional love and care and for always being there for me. I am lost for words to express my gratitude, except I always pray to Allah for you all until I meet Allah in the hereafter. My special gratitude goes to my parents-in-law, Djalaluddin, Husna, and *Al-Marhumah* Nuraini who always supported and prayed for me. My gratitude also goes to my sisters Rusnani, Nurbaiti, Mariani, brothers

Nurdin, Murni, and Zulkarnaini, sister-in-law Tuti Alawiyah, brothers-in-law Bustami, Midi, Nazaruddin, Budi Satria, Jumadi M Yasin and all my cousins and nephews.

I reserve the greatest amount of appreciation for my wife, Yulianti, who has supported me in this endeavor in every way imaginable. As my closest friend, she has helped me through all the frustrations and all the challenges that have faced me in doctoral program. In the end, I would like to express my sincere gratitude for my sons, Muhammad Mahadhir Asnawi and Muhammad Al-Fathih Asnawi, my daughters, Nazla Yulias Fitria Asnawi and Nur Ramadhani Asnawi. Without your understanding, patience, sacrifice, and support, I would not have gained this doctoral program. I love them all endlessly, and I dedicate this work to them and our family's bright and exciting future.

I would also like to express my gratitude to the government of Aceh that has sponsored my doctoral program during 3.5 years. Without supporting from government of Aceh, it is hard for me to finish my doctoral program at CITM, USM Malaysia. I will dedicate my knowledge to the Acehnese people in particular and to Indonesia in general. I would also like to thank Mr. Anwar Hanafiah and Mr. Hendra Heriansyah who have kindly permitted me to use their class during my experimental research. In addition, thank you very much for students who have engaged in this experimental research.

Finally, my sincere appreciation and thank go to Dr. Usman Kasim and Dr. Sofyan A Gani who have been kindly validated and read my lessons for the purpose of my experimental research. May God bless you all.

TABLE OF CONTENTS

	Page
AKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	x
ABSTRAK	xi
ABSTRACT	xiii
CHAPTER 1: INTRODUCTION	1
1.0 Introduction	1
1.1 Background of the Research	4
1.2 Statement of the Problem	11
1.3 Research Objectives	13
1.4 Research Questions	14
1.5 Research Hypotheses	14
1.6 Theoretical Framework	16
1.7 Significance of the Study	21
1.8 Operational Definitions	22
1.9 Conclusion	25
CHAPTER 2: REVIEW OF LITERATURE	27
2.0 Introduction	27
2.1 First Language Learning (L1)	27
2.2 Levell's (1989) Lexicon Model and Gagne's Hierarchy of Learning	36
2.3 The Critical Period in Second Language Acquisition	51
2.4 Approaches to Teaching and learning English as a Second/Foreign Language	52
2.4.1 Code switching approach	53
2.4.2 Bilingual approach	58
2.4.3 Natural approach	60
2.5 Communicative Language Teaching (CLT)	63
2.6 Cooperative Learning	66
2.7 Promoting Bilingualism: Teaching of L2 with L1 Structure	68
2.8 Teaching of L2 among Non-Native Speakers	72
2.9 Components of English Language	79
2.9.1 From L1/bilingual perspective	79
2.9.2 From L2/foreign language perspective	84
2.10 Evaluation/Assessment of Language Skills	86
2.10.1 From L1/bilingual perspective	87
2.10.2 From L2/foreign language perspective	88

2.11	Immersive Strategies	90
2.11.1	Immersion	91
2.11.2	Second Language Immersion	91
2.11.3	Immersive Multimedia Learning	100
2.11.4	Multimedia supported language learning	103
2.11.5	Peer Support and Language Learning Environment	105
2.11.6	Motivation and Multimedia Language Supported Learning	108
2.12	Past Studies on Using Immersion & Multimedia in Learning EFL/ESL	110
2.13	Conclusion	125
CHAPTER 3: RESEARCH METHODOLOGY		132
3.0	Introduction	132
3.1	Research Design	133
3.2	Population and Samples	136
3.2.1	Population	136
3.2.2	Sample	137
3.3	Learning Setting	137
3.3.1	Content of Immersive Multimedia Learning with and without peer support	138
3.3.2	Learning Materials	143
3.3.3	Learning Activities	143
3.4	Procedures of Data Collection	146
3.4.1	Validity of the Instruction	146
3.4.2	Instruments of the Study	147
3.5	Research Procedures	151
3.5.1	Duration of Each Session of Learning	160
3.6	Procedure of Data Analysis	161
3.7	Pilot Study	163
3.8	Conclusion	164
CHAPTER 4: RESEARCH FINDINGS		165
4.0	Introduction	165
4.1	Sample Demographics	165
4.2	Group Equivalence	166
4.3	Evaluation of ANOVA Assumption for Normality	168
4.4	Evaluation of ANOVA Assumption for Homogeneity of Variance	169
4.5	Testing of the Hypotheses	171
4.6	Conclusion	194
CHAPTER 5: DISCUSSION		196
5.0	Introduction	196
5.1	Performance by Teaching Method	197
5.2	Performance by Achievement and Teaching Method	207
5.3	Performance by Gender	213
5.4	Learning Motivation	215
5.5	Implication and Contribution Towards Theory and Practice	216

5.6	Recommendations	218
5.7	Limitations of the Study	220
5.8	Conclusion	220
REFERENCES		222
APPENDICES		241

LIST OF TABLES

		Page
Table 2.1	Standard of Competence and Basic Competence (grade IV, Semester I)	74
Table 2.2	Assessment of English Proficiency Level	90
Table 2.3	Immersive Features	126
Table 3.1	Comparison of Learning Activities in Immersive Experience	146
Table 3.2	The Roles of the Lecturers, Students, and Researcher during the Teaching and Learning Process	156
Table 3.3	Immersive schedule and learning topics/activities with and without peer-supported (in classroom) November-December 2013	158
Table 3.4	Immersive schedule and learning topics/activities with and without peer- supported (at home/outside class) November-December 2013	159
Table 3.5	Data analysis	162
Table 4.1	Demographics of the Sample	166
Table 4.2	Test of equivalence by treatment and English Achievement	167
Table 4.3	Test of equivalence by gender and English Achievement	167
Table 4.4	Test of equivalence by treatment, gender and English Achievement	168
Table 4.5	Skewness and Kurtosis for Reading, Speaking, Gain-Vocabulary, Gain Grammar, Motivation	169
Table 4.6	Test of Homogeneity of Variances by treatment (With Peer support vs. without peer support)	169
Table 4.7	Test of Homogeneity of Variances by treatment and achievement	170
Table 4.8	Test of Homogeneity of Variances for treatment by gender	170
Table 4.9	Means, Standard Deviations, and results of ANOVA for Gain in Vocabulary by Treatment	171

Table 4.10	Means, Standard Deviations, and results of ANOVA for Gain in Grammar by Treatment	172
Table 4.11	Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment	173
Table 4.12	Means, Standard Deviations, and results of ANOVA for Oral Production in Speaking by Treatment	174
Table 4.13	Means, Standard Deviations, and results of ANOVA for Gain in Vocabulary by Treatment and High Achievement	175
Table 4.14	Means, Standard Deviations, and results of ANOVA for Gain in Grammar by Treatment and High Achievement	176
Table 4.15	Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment and high English achievement	178
Table 4.16	Means, Standard Deviations, and results of ANOVA for Oral Production in Speaking by Treatment and High English Achievement	179
Table 4.17	Means, Standard Deviations, and results of ANOVA for Gain in Vocabulary by Low English Achievement and Treatment	180
Table 4.18	Means, Standard Deviations, and results of ANOVA for Gain in Grammar by Low English Achievement and Treatment	181
Table 4.19	Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment and Low English achievement	183
Table 4.20	Means, Standard Deviations, and results of ANOVA for Oral Production in Speaking by Treatment and Low English Achievement	184
Table 4.21	Means, Standard Deviations, and results of ANOVA for Gain in Vocabulary and Grammar by English Achievement for Male Students	186
Table 4.22	Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment for Male	187
Table 4.23	Means, Standard Deviations, and Results of ANOVA for Oral Production in Speaking by Treatment for Male Students	188
Table 4.24	Means, Standard Deviations, and results of ANOVA for Gain in Vocabulary and Grammar by English Achievement and Female Students	190

Table 4.25	Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment for Female Students	191
Table 4.26	Means, Standard Deviations, and Results of ANOVA for Oral Production in Speaking by Treatment for Female Students	192
Table 4.27	Means, Standard Deviations, and Results of ANOVA for motivation by Treatment	193

LIST OF FIGURES

		Page
Figure 1.1	Lexical Comprehension/Production for Oral Production Skills (Modified from De Bot (1997)	17
Figure 2.1	The Lexical Level of Concepts (Levelt, 1989)	34
Figure 2.2	The Lemma Level (Levelt, 1989)	34
Figure 2.3	The Lexeme Level (Levelt, 1989)	35
Figure 2.4	The Lexicon Model (Levelt, 1989)	38
Figure 2.5	Simplified from Gagne's Stages of the Development of the Internal Language Structures (Gagne's, 1985)	44
Figure 3.1	Research Variables	134
Figure 3.2	Quasi-experimental pretest and posttest design	135
Figure 3.3	The 2 x 2 quasi experimental design for achievement and gender	136
Figure 3.4	Steps of the Treatment of Immersive Multimedia with and without peer support	150
Figure 3.5	The Research Procedure	151
Figure 3.6	Flowchart of the Immersive Multimedia Learning with and without peer support	155

KESAN KAEDAH PEMBELAJARAN MULTIMEDIA IMERSIF BERSAMA
SOKONGAN RAKAN KE ATAS PERBENDAHARAAN KATA, TATABAHASA,
PRESTASI LISAN BAHASA INGGERIS DAN MOTIVASI

ABSTRAK

Kaedah pengajaran bahasa Inggeris yang digunakan di Indonesia mempromosi strategi *code-switching* yang menyebabkan secara berleluasa sebutan lisan bahasa Inggeris dibuat mengikut resam bahasa Indonesia. Kajian ini menguji kesan kaedah pembelajaran imersif yang tidak melibatkan bahasa pertama pelajar dengan menggunakan bahan-bahan multimedia bersama sokongan rakan ke atas prestasi bahasa Inggeris dari aspek perbendaharaan kata dan tatabahasa, serta keterampilan lisan dalam membaca dan bertutur berdasarkan enam aspek iaitu hentian, frasa, penekanan, intonasi, kadar, dan integrasi. Kajian ini juga mengkaji kesan kaedah ini ke atas prestasi dan motivasi mengikut pencapaian pelajar dan jantina. Kajian kuasi-eksperimen dengan reka bentuk faktorial 2×2 bersama ujian-ujian pra dan pasca telah digunakan. Faktor pertama ialah pemboleh ubah bebas kajian iaitu kaedah pengajaran multimedia imersif dengan dan tanpa sokongan rakan, manakala faktor kedua terdiri daripada pencapaian pelajar untuk bahasa Inggeris dan jantina. Pemboleh ubah bersandar kajian ialah perbendaharaan kata, tatabahasa, motivasi serta keterampilan lisan dalam membaca dan bertutur yang diukur melalui faktor-faktor hentian, frasa, penekanan, intonasi, kadar, dan integrasi. Sejumlah 80 pelajar universiti tahun pertama dari kelas-kelas sedia ada yang mendaftar di dalam kursus bahasa Inggeris sebagai bahasa asing telah dipilih untuk kajian ini dan rawatan berlangsung selama lapan minggu. Data telah dianalisis menggunakan ujian-ujian ANOVA sehala.

Dapatan menunjukkan bahawa kaedah pembelajaran multimedia imersif bersama sokongan rakan secara signifikan meningkatkan prestasi kemahiran lisan dalam membaca dan bertutur. Analisis mengikut pencapaian mendapati bahawa kaedah pembelajaran multimedia bersama sokongan rakan secara signifikan meningkatkan prestasi lisan hanya dalam bertutur di kalangan pelajar pencapaian tinggi, manakala di kalangan pelajar pencapaian rendah kaedah pembelajaran multimedia imersif bersama sokongan rakan secara signifikan meningkatkan prestasi kemahiran lisan dalam membaca dan bertutur. Sebaliknya, pelajar perempuan di dalam kaedah pembelajaran multimedia bersama sokongan rakan secara signifikan meningkatkan kemahiran lisan pada semua faktor untuk membaca dan bertutur. Akhir sekali, dapatan menunjukkan bahawa tidak terdapat perbezaan yang signifikan bagi faktor-faktor perbendaharaan kata, tatabahasa, dan motivasi mengikut kaedah, dan pencapaian pelajar serta jantina. Dapat disimpulkan bahawa kaedah multimedia immersif dengan sokongan rakan mengurangkan penggunaan *code-switching* dalam kalangan pelajar dan telah membolehkan pelajar, terutama pelajar pencapaian rendah dan pelajar perempuan memperoleh kemahiran lisan bahasa Inggeris menghampiri laras penutur asal.

THE EFFECTS OF IMMERSIVE MULTIMEDIA LEARNING WITH PEER
SUPPORT ON VOCABULARY, GRAMMAR, ENGLISH ORAL SKILLS,
AND MOTIVATION

ABSTRACT

The methods of teaching English in Indonesia promote the use of code-switching strategies and have resulted in the widespread practice of pronouncing English words following the structures of the Indonesian language. This study investigated the effects of the immersive multimedia learning technique with peer support on performance in English in terms of vocabulary, grammar, and oral production skills in reading and speaking that involved six measures, namely, pausing, phrasing, stress, intonation, rate, and integration without the mediation of the students' first language. Also investigated were the effects on performance by achievement and gender, and on motivation. The quasi-experimental 2 X 2 factorial design with pre-test and post-test was employed for the study. The first factor was the strategy of learning, namely the use of immersive multimedia learning with and without peer support, while the second factors comprised achievement in English, and gender. Eighty first-year university students enrolled in an English as a foreign language course were selected for this study and the treatment lasted for eight weeks. Data were analysed using one-way ANOVA. The findings showed that the immersive multimedia learning with peer support group reported significantly better performance in all measures of oral production for reading and speaking. Analyses by achievement showed that the high achievement students in the immersive multimedia learning with peer support group reported significantly better performance in all measures of oral production only for

speaking while the low achievement students in the immersive multimedia learning with peer supported group reported significantly better performance in all measures of oral production for reading and speaking. Analyses by gender reported that males in the immersive multimedia group with peer support performed significantly better in four of the six measures of reading skills, namely, phrasing, stress, intonation, and integration as compared to their counterparts in non-peer supported group and there were no significant differences for pausing and rate. On the other hand, female students in the immersive multimedia learning with peer support group performed significantly better in oral production in all measures of oral production for reading and speaking than their counterparts in the group without peer support. However, there were no significant differences in performance for vocabulary, grammar, and motivation between the two methods and by student achievement and gender. These findings showed that the immersive multimedia technique with peer support reduced the use of code-switching strategies among the students and enabled them to develop oral production skills in English approaching the patterns of native speakers especially among low achievement and female students.

CHAPTER I

INTRODUCTION

1.0 Introduction

The level of English mastery in Indonesian schools is low. According to Kweldju (2002) many students who received high English scores at senior high school levels and university are still experiencing difficulty in speaking, writing, pronouncing, and reading English words correctly. This problem is endemic and covers English and non-English majors (Kweldju, 2002). For example, the script that they write is difficult to understand because of low mastery of vocabulary, grammar or sentence structure. Another example stated by Kweldju (2002) is that many English lecturers in Indonesia have their articles rejected by international journals because of poor English. Hamdi (1998) earlier reported that many students were unable to communicate fluently in English due to limited vocabulary and lack of practice. The level of vocabulary mastery in Aceh is not far different from other part of Indonesian schools as a whole (Abdullah, 1997).

In Indonesia, English is also taught at university as a subject matter or medium of instruction (Dardjowidjojo, 2002; Ibrahim, 2004). In the teaching and learning process, lecturers tend to use the traditional methods. It is no wonder that the levels of English mastery among Indonesian students are still low (Kweldju, 2002). A report by English First English Proficiency Index (EPI, 2011) found that Indonesian was ranked 34th from 44 countries in terms of English Proficiency, indicating a very low

mastery. In line with the EPI, the Progress in International Reading Literacy Study (PIRLS) conducted a research in term of reading literacy in 2006. The study revealed that out of a total of 45 countries surveyed, Indonesia ranked 42nd in the student literacy rate.

According to the PIRLS, Indonesian students scored on average of 405 in reading literacy. It is far below the mean international score of 500 (PIRLS, 2011). In terms of gender, PIRLS reported that differences in reading ability by gender were consistent across grade levels. Female reading achievement was higher than the males reading achievement (Klecker, 2006; PIRLS, 2011).

Based on the issues and the need to improve the mastery of English, the Indonesian government has introduced many policies to revamp the system of education in Indonesia (Departemen Pendidikan Nasional, Depdiknas, 2005). The human resources index should be improved through increasing the quality of education, changing curriculum, teaching facilities, and providing opportunities for students to study abroad and so on. The curriculum of the English language is also changed where English is taught from primary school level (third up to sixth grade) together with other local contents (Sutardi, 2005). Another policy issued by the government is on the improvement of teachers' qualification (Depdiknas, 2010). Teachers who have not graduated from undergraduate level of education are sent to universities to study within one or two years in order to get their undergraduate diploma. This regulation also requires young teachers to take their professional teaching certificate during one year at university. The purpose of issuing this regulation is to produce professional English teachers (Depdiknas, 2010).

In accordance with the regulation, the Indonesian Ministry of National Education, backed by available funds provided by the new state constitution, has proposed the creation of the International Standard School (*Sekolah Bertaraf Internasional, SBI*) program to be participated by hundreds of schools starting from 2006 (Martiyanti, 2008). The International Standard School is expected to improve academic attainment (Martiyanti, 2008). This school employs English as the medium of instruction for science and mathematics. Encouragingly, teachers use English to start and end the class for all other subjects in this school. The government has also conducted several reforms in the national school system with regarding to school management, curriculum, education financing, final examination, community participation, and teacher certification (Kristiansen & Pratikno, 2006; Raihani, 2007; Fitriah, 2010; Raihani & Sumintono, 2010).

English becomes more important in Indonesia because of globalisation whereby students have to compete with foreigners who are coming to Indonesia either for the purpose of studying or doing other business (Yuwono, 2005). Many speakers of other languages are learning English every year. The English language has been introduced to public school systems from primary school grades. English language is also used as the medium of instructional for teaching science and math. A major issue is that weaknesses in English mastery are carried forward from the primary levels to the secondary levels and later to the university level. Many universities require English as one of the requirement for admission or graduation. In addition, it is estimated many young learners learn English from public education, the private English instruction. According to the English Proficiency Index (EPI) within the next

decade, as many as two billion people are learning English at any given time (EF EPI 2011).

1.1 Background of the Research

English subject has been taught and learned by university students for many years (Dardjowidjojo, 2002; Ibrahim, 2004). Many methods of teaching and learning have been used to improve English language skills (Krashen, 1982). Some of them are traditional method, communicative language teaching, and cooperative learning, etc. (Krashen, 1982; Corp, 1989). However, the methods used by teacher to improve language performance are still in sufficient. The use of appropriate methods and approaches in teaching and learning English are the important things to consider. Nowadays, teaching and learning English language tends to use traditional method that focuses on direct teaching vocabulary, grammar, reading, listening, and conversational patterns. The correction is given whenever students make mistake (Kweldju, 2002).

The low mastery of English in Indonesia is due to many reasons. Firstly, English is classified as a foreign language (Lauder, 2008). Students are only taught basic communicative competence in English at the third year of elementary school (Kurniasih, 2011). English is used and spoken in the classroom, but outside the classroom they revert to their mother tongues (Liando, Moni, Baldauf & Richard, 2005). Secondly, factors such as large classes, limited teaching facilities, poor attitude toward English, teacher qualification and experience, and inadequate assessment tools inhibit the proper teaching of English (Nurkamto, 2003; Djufri et al., 2011). Kompas

(2006) reports that of the 2.7 million teachers, only 35% have undergraduate degrees and their teaching methods or strategies are grossly inadequate (Marcellino, 2008). In addition, Marcelino also found that the existing environment does not encourage and support the use of English among the students. Finally, students' low motivation and interest in learning English is also a major influence for the low mastery of English (Samad, 1989; Panggabean, 2007).

On the other side, since English is as an international language plays an important role for university students for various purposes. English is not only learned as a subject matter at universities in Indonesia but it is also used as medium of communication in various aspects human affairs (Pennycook, 1994; Phillipson, 1992). University students are also required to present a presentation in the classroom as the assignment that given by their lecturers especially for English skills. For this reason, it is not doubt that the ability to speak and read fluently in English which are "a product of standardisation, professionalisation and linguistic economy" (Salager-Meyer, 1999). Many Indonesian universities like Universitas Indonesia, Universitas Trisakti, Universitas Katolik Atmajaya are developing international programs using English as a medium of instruction in the classroom (Ibrahim, 2004). To achieve the level of standardized English, the use of appropriate method in the learning process is important.

One of the appropriate methods to apply in the teaching and learning process to improve students' language skills is immersion program (Tallinn, 2005). Following Levelt (1989) as simplified by de Bot (1997), for good acquisition of a language, learners need a program that develops the language lexicon and semantic structure

efficiently. Gibbons (2002) suggests the use of an immersive and linguistically and culturally rich environment, and employ a range of learning strategies to bring the process of meaningful learning on the language skills. The application of the appropriate methods or approaches and strategies play important roles to master a second language. For example, if someone wants to learn and master English language quickly, he or she should stay in the country where English language is used (Polanyi, 1995; Wilkinson, 1998).

However, a strategy used by a learner that is highly effective in one context of learning may not work well at all in another context and vice versa. Also it is not easy to motivate learners to learn a new language (Nakata, 2006). As human behaviours are complex, not every strategy is suitable in all contexts of learning. In this case, lecturers should select the most appropriate strategies to be employed in their own teaching and learning in the classroom (Bachtiar, 2011). In addition, some students apply memorizing strategy in their learning. In fact, memorizing is not an effective strategy to master the language being learned (Fromkin, et al., 2011). There is a process of memorizing in learning language but only in a small portion emphasizes on it. Learning a language should be more on the authentic inputs that enable students to acquire the language naturally and spontaneously as well as social interaction (Levelts, 1989).

In learning English, there are four sub-sets of strategies that may be used by students in learning English, namely, retrieval strategies, rehearsal strategies, cover strategies, and communication strategies (Cohen, 1996). Retrieval strategies are those strategies for retrieving the subjunctive forms when the occasion arises in or out of

class, and for choosing the appropriate forms. Rehearsal strategies constitute another subset of language use strategies namely strategies for rehearsing target language structures such as form focused practice. Form focused practice, for instance, is practicing the subjunctive forms for different verb conjugations. Cover strategies are strategies used by learners to create the impression that they have control over material of teaching and learning (Cohen, 1996).

Communication strategies focus on approaches to conveying new meaningful information to the recipient. Communication strategy does/does not have any impact on learning processes. Learners may use a vocabulary item encountered for the first time in a given lesson to communicate a thought without any intention of trying to learn the word, for instance. However, they may insert the new vocabulary item into their communication without intending to learn or communicate any particular aspect of the target language reslessly in order to promote their learning (Cohen, 1996).

Study abroad is another way to improve learners' process of acquiring and learning a second language. In relation to the above statement, a study conducted by Ullakonoja (2009) in terms of improving oral production skills for fluency by studying abroad. The study reported that there was a significantly improved students' fluency by staying and learning a second language in abroad. The study also found that the majority of students increased their second language (L2) speech and articulation rate during 3.5 months stay in Russia statistically significantly as well as their perceived fluency increased. Also, the study found that students improved their reading aloud became faster and more fluent by staying in Russia. According to the study why students could improve their speech rate and articulation as well as reading

aloud became faster due to students have the possibility of getting a wide variety of native speaker input in L2. Students also got more L2 input from their teachers who were native speakers (Ullakonoja, 2009).

However, in countries like Indonesia, linguistically and culturally rich environments for learning English are for all practical purposes completely absent with the only inputs or drivers for English being teachers or lecturers (Kagan, 1995). Advances in ICT and multimedia now allow for linguistically rich learning environments to be created by compiling recorded contents to provide the immersive inputs in place of the teacher. Multimedia packages for immersive learning are the tool students use to construct language skills, knowledge, and understand their world. English language acquisition is integrated in the learning of all subject areas. This goal can be achieved by providing a linguistically rich learning environment through an alternative means: English books, videos, CDs, youtube, radio and TV programs, posters, visuals, Web sites, songs, and dramatizations. All play a central role in second language learning (Alberta Education, 2010).

In addition, the frequent use of authentic multimedia situation enables students to make links between what they are learning in school in English and real life situation. Such situations are important in English immersion classroom or atmosphere since this period is the only one where they are exposed to English. Besides, the use of meaningful and authentic multimedia situations increases students' motivation to learn English and to learn content through the English language (Alberta Education, 2010). Moreover, authentic and meaningful learning experiences allow students to develop their cognitive skills necessary to comprehend,

interpret, analyze, and evaluate the world around them (Met, 1987). The use of peer-supported in immersive learning enables students to learn English easily.

One of the most promising strategies in improving the quality of teaching and learning English is through the use technology or multimedia supported lessons (Salaberry, 2001). Multimedia is the use of multiple forms of media in a presentation (Schwartz & Beichner, 1999). It is the combined use of several media, such as movies, slides, music, and lighting, especially for the purpose of education or entertainment (Brooks, 1997). Besides, multimedia can improve students' performance and help teachers to enhance teaching and learning material development and syllabus design (Nguyen, 2008; Coiro, Knobel, Lankshear, & Leu, 2008). In addition, the Internet is believed to have much influence on foreign language syllabus design and provided a quantities of English learning materials that it may change the roles of the teacher as well as the students) so far as some of the authority and power is transferred to the learners (Harben, 2001; Chapelle, 2003; Larsen-Freeman & Freeman, 2008).

Students can complete the exercises in small group to foster the process of learning collaboratively with their peers. Using collaborative learning provides an opportunity for students to simultaneously practice speaking, listening and reading skills (Kagan, 1995). In addition, the use multimedia simulates the English rich environment, learning is a personal experience, and students should learn on their own first to be able to interact with the teacher in class, peer-support has been shown to be effective in learning. Students need to be exposed to a rich environment and be provided with various learning strategies that will support their learning adventure

that is very new to them (Kagan, 1995; Gibbons, 2002). In other words, the more support multimedia can provide English language learners in the classroom, the faster second language development will be achieved.

It is acknowledged that the significant role multimedia play in scaffolding language and learning for learners whereby reflecting in the teaching learning process. The learning process between peer group and Without Peer is not different in term of immersive multimedia input. Working with peers enables students to practice their English immediately instead of working alone. They can share knowledge and solve the problem being faced (Kagan, 1995).

Under current circumstances, it is impossible for Indonesian students to have immersive English environments as most parents do not speak English or have access to English-speaking environments. Like all L2 learners, these students badly need the immersive strategies to facilitate them to acquire the hidden components of English that are not taught directly as mentioned by Schiltz (2012). They are morphemes, syntax, semantics, pragmatics, knowing the purpose of the communication, knowing when to start, maintain, and terminate, making appropriate comments and asking, determining what visual cues, using appropriate sentence structure with other, understanding the “rules” for politeness, knowledge of social norms, knowing when to take turns, understanding how to “repair” and providing a smooth flow of conversation. In the immersion strategies, these all components of language are presented intergradedly and students will acquire naturally as they acquire their L1 level mastery (Schiltz, 2012).

On the contrary, these components of English language from the perspective of L2 theories are taught separately in the teaching and learning process. If all these components are taught separately followed by using code-switching then, this will lead to pidginization of a language not L1 level of mastery. It is also paradox in which the way of teaching and learning English by using L2 theories are carried out. Teaching English language skills and components are conducted in separable and not in the real environment, in one side. The test and assessments of the language use authentic materials and students are expected to master at L1 fluency level.

1.2 Statement of the Problem

Many university students in Indonesia encounter difficulties in learning and communicating through English language automatically and effectively particularly in relation to critical thinking when they continue their studies abroad (Philips, 1994; Hasanah, 1997). The specific difficulties are shaped not just by unfamiliarity with English *per se* but by the linguistic character of Indonesian, the approach to English learning in Indonesia, and what happens when the two different pedagogical and linguistic traditions intersect (Novera, 2004). Teaching methods for English language play an important role in term of improving oral production skills.

The teaching of a second language using the immersive method has been successfully demonstrated in Canada in the teaching of French among non-native speakers (Alberta Education, 2010). The Canadian immersive programs were introduced in 1965 and employed first language (L1) learning methods to teach a second language (L2) to elementary pupils. The focus was on creating an authentic or

real environment to learn French in the classroom for the learners to acquire the language through integration, context-based meaning and use, communicative skills, and functional applications (Tallinn, 2005). This method was highly effective and was later extended to the teaching of foreign languages (Curtain & Dahlberg, 2004; Lenker & Rhodes, 2007). However, in the Canadian method, the teacher played an important and central role and was as the model or driver of the language being learned.

The standard approach in teaching a second or foreign language in universities is the use of the direct method where everything about the language is explained or presented to the students by the instructors (Novera, 2004). Students may then individually receive additional guidance or practice by listening and rehearsing to selected audio recordings in the language laboratories. Learning is presumed to occur through cognitive activities such as code switching and as well as modeling strategies and self-checking as students try to mimic the recordings they hear. The use of immersive methods among older learners has not been sufficiently studied. With easy availability of multimedia resources on the web, the astute collection of a variety of these files can be used to provide the contents and structure for the immersive and authentic experience of the target language. With multiple and complex inputs of the use of the target language the students go beyond mimicking the sentences. From the inputs, they can discern the nuances of the language as well as the tonal and contextual applications of the terms in developing the feel and grounding of the language.

Language is also more effectively acquired in a social context (Levelt, 1993). Learners can benefit from additional guidance and inputs from peers or other learners as they master the new language. This is especially useful and easy among adult learners who already have the ability to evaluate diligently. Thus, for this study dyadic groups were created together with the immersive strategies to provide the learners with peer support and a mechanism for evaluation and immediate feedback during reading and speaking exercises.

1.3 Research Objectives

The purpose of this study was to investigate the effects of the immersive multimedia learning method with peer support activities on performance in English and motivation. The objectives of the study were:

1. To investigate the effects of immersive multimedia learning with and without peer support on performance in English in terms of (a) vocabulary, (b) grammar mastery, and (c) oral production in reading and speaking
2. To investigate the effects of immersive multimedia learning with and without peer support on performance in English in terms of (a) vocabulary, (b) grammar mastery, and (c) oral production in reading and speaking by student achievement.
3. To investigate the effects of immersive multimedia learning with and without peer support on performance in English in terms of (a) vocabulary, (b) grammar mastery, and (c) oral production in reading and speaking by gender, and

4. To investigate the effects of immersive multimedia learning with and without peer support on motivation for learning English.

1.4 Research Questions

1. Are there significant differences in terms of (a) vocabulary, (b) grammar mastery, and (c) oral production in reading and speaking between the students who received immersive multimedia learning with peer support and those who did not receive such support?
2. Are there significant differences in terms of (a) vocabulary, (b) grammar mastery, and (c) oral production in reading and speaking by student achievement between the students who received immersive multimedia learning with peer support and those who did not receive such support?
3. Are there significant differences in terms of (a) vocabulary, (b) grammar mastery, and (c) oral production in reading and speaking by gender between the students who received immersive multimedia learning with peer support and those who did not receive such support?
4. Are there significant differences in terms of motivation between the students who received immersive multimedia learning with peer support and those who did not receive such support?

1.5 Research Hypotheses

The hypotheses of the this study are based on the above research questions are stated in the alternate form as follows:

- H₁ : Students who engaged in immersive multimedia learning with peer support will perform significantly better in English in terms of (a) vocabulary, (b) grammar, and (c) oral production in reading and speaking than those who engaged without peer support.
- H₂ : High achievement students who engaged in immersive multimedia learning with peer-support will perform significantly better in English in terms of (a) vocabulary, (b) grammar, and (c) oral production in reading and speaking than their counterparts who did not receive peer support.
- H₃ : Low achievement students who engaged in immersive multimedia learning with peer-support will perform significantly better in English in terms of (a) vocabulary, (b) grammar, and (c) oral production in reading and speaking than their counterparts who did not receive peer support.
- H₄ : Male students who engaged in immersive multimedia learning with peer-support will perform significantly better in English in terms of (a) vocabulary, (b) grammar, (c) oral production in reading and speaking than their counterparts who did not receive peer support.
- H₅ : Female students who engaged in immersive multimedia learning with peer-support will perform significantly better in English in terms of (a) vocabulary, (b) grammar, (c) oral production in reading and speaking than their counterparts who did not receive peer support.
- H₆ : Students who engaged in immersive multimedia learning with peer-support will report significantly higher motivation than those who engaged without peer support.

As there are many sub-factors in the dependent variables, the hypotheses are presented here in the nested form for brevity and simplicity. They are stated in Chapter 2 and analysed by each sub-factor in Chapter 4.

1.6 Theoretical Framework

This study is based first language learning theory as presented in Levelt's (1989) lexicon model of language acquisition and production. The model explains the acquisition of a language through the development of internal structures in the form of speech motor patterns, conceptual systems, articulatory motor systems and phonemization, takes the approach that language is a reconstruction or reproduction from learned phonological codes.

De Bot (1997) simplified Levelt's (1989) lexicon model to clarify the early stages of learning and production in mastering a second language through inputs in the form of speech and text. According to de Bot, in learning, these inputs are first decoded into lexemes and lemmas that are then recombined or re-associated to form concepts and develop comprehension using various inference strategies. For oral production, the learner selects the acquired lemmas and lexemes, and encode them into required forms of outputs as required by the situation. As no textual inputs are used in this study, De Bot's model is modified to employ the multimedia inputs in place of speech and texts and reading and speaking outputs in place of writing and speaking (Figure 1.1)

Audition/Comprehension

Production

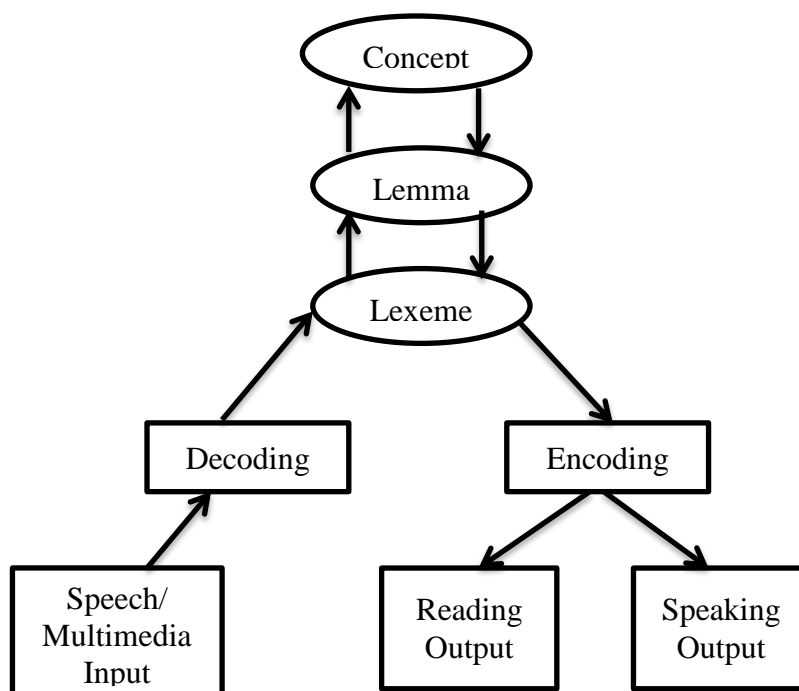


Figure 1.1: Lexical Comprehension/Production for Oral Production Skills (Modified from De Bot (1997))

Following De Bot, the flow of improving learners' processes outputs in terms of reading and speaking oral skills is from speech multimedia input as a starting point. From speech multimedia input, learners listen and watch various speech inputs spoken by various recorded native speakers. Then learners will decode the sounds or phonetic strings spoken in the speech multimedia inputs. Learners may not know the sounds or phonetics string from speech multimedia input at first. However, when they engage for few time in listening and watching the speech multimedia input, learners become familiar with the sound or phonetic strings that they listen and watch. From that, then learners decode the sound and phonetic string. After that, the next stage is match the lexemes based on the speech multimedia inputs. Lexeme is related to phonological decoding and lexical selection from speech multimedia input. The next stage is

lemmas. Lemma is related semantic and syntactic decoding based on the speech multimedia input.

Lastly, learners come to the concept stage. In this stage, learners try to conceptualize the concepts based on appropriate lexemes and lemmas. From concepts stage, learners try to use appropriate lemmas and lexemes based on sound or phonetic strings (decoding) until they are able to read and speak fluently as the output of the processes of learning a second language. In other words, after having word forms, syntactic forms, semantic forms, then, students come up with a concept to formulate the meaningful spoken form. After students have ability to formulate the meaningful concept then students come up with their ability to use and practice oral skills production (reading and speaking) for pausing, phrasing, stress, intonation, rate, and integration) without mediation through their first language (L1) De Bot (1997).

According to de Bot (1997) making inferences is important in the learning process. Inference is the rational and logical point made based on the given inputs, facts or circumstances to draw a conclusion. Learners may encounter many unknown word meanings at first when they listen and watch the spoken inputs from various recorded native speakers. In this case, the ability of the learners to infer the meaning of the unknown words from the context of discourses being listened and watched from the speech multimedia input. The word 'interest' for instance, this word may have different meaning when it found in the context of banking rather than in the common context. Usually, learners know the meaning of the word 'interest' in their mind is as the feeling of desiring to know or learn about something or someone. However, the word 'interest' may have different meaning when it found in the banking system.

Learners may not understand the word 'interest' means if they do not have background knowledge about banking. In banking system, the word 'interest' means money paid at a particular rate regularly for the use of money lent or for delaying the repayment of a debt.

De Bot explains the meaning of inference in the context of dealing with the problem of the unknown word found in the learning processes. To infer the meaning of the words, learners actively and creatively try to identify the meaning of the unknown words by making an informed guess about the word meaning using available cue (De Bot, 1997). Therefore, the ability to do inference to anticipate the problem in understanding the lexemes, lemmas, and concepts based on speech multimedia input related to the unknown or unfamiliar words in the learning process is important (De Bot, 1997).

De Bot, further, describes eight types of inferences involved in the learners' learning processes, namely; (1) Sentence Level Grammatical Knowledge, where it is related to knowledge of relationships among speech parts in a sentence as the learners listen and watch from speech multimedia input. This is often marked by word order to deal with the unknown noun and adjective. (2) Knowledge of word morphology where it is related to the learners' knowledge of second language (L2) words derivation such as stems and affixes, and of grammar inflection. For instances, the stem and affixes – *tion*, *-ly*, *-ed*, and *-s*, was common used to infer the meaning of the unknown word, and (3) punctuation.

Another strategy to do inference is punctuation. Learners sometimes use their knowledge of punctuation and capitalization rule to infer the meaning of the target language word from a spoken conversation context. (4) World knowledge, where in this stage learners repeatedly use their knowledge of the theme and topic of conversation context to infer the meaning of an unknown word. In this stage, world knowledge and discourse knowledge sources may have been activated in the inference process. (5) Discourse, where occasionally learners use information from the part of the discourse to guess the meaning of the target language word. (6) Homonymy, where some learners use their knowledge of sounds relationships to guess the meaning of an unknown word. Learners do this based on the phonetic similarity between the target language word and another word in the learners' mental lexicon.

This process is sometime useful, but is often a source of confusion and misunderstanding. (7) Knowledge of word association, where it is another way to infer the meaning of an unknown target language word is through learners' knowledge of word association. In this case, two knowledge sources are to be used: word associations and word derivations. (8) Cognates, where it is related to an easy word to remember because it looks and means similar as a word learner already know. The word 'sufficient' in English and the word 'suffisant' in French are the samples of cognates. Learners can infer the meaning of 'suffisant' word into English as 'sufficient'.

De Bot's model explains how learners develop the feel and grounding of the new language that are difficult to be taught directly. The first path is the Audition and Comprehension phase and the second path is the production phase. The presence of

peer support enhances the production phase. For adult second language learners who have more advanced inference-making abilities, the processes of chaining, verbal association, discrimination learning at the stage of decoding input would be sufficient to trigger the lexical processing suggested by Levelt and de Bot. Thus, this study is based on Levelt's and De Bot's models of lexical processing as well as Gagne's hierarchy of learning to improve learners' oral production skills for reading and speaking fluency through peer-supported immersive multimedia strategy.

1.7 Significance of the Study

This research is important to be conducted as a result of current teaching approaches used by language teachers and learner are not satisfactory in terms of English mastery levels. Theories of L2 learning do not give greater impact toward L1 mastery level. Students have been taught and learned English for many years by using traditional methods which focus direct teaching of language aspects, communicative pattern compared to immersive program that emphasize on integration, content-based, communicative or functional instruction (Tallinn, 2005).

The research is also important to prove whether the application of multimedia supported immersive strategies improve students' English language acquisition. In addition, it provides insight for learners, teachers, and lecturers in Aceh into how to initiate and provide an alternative strategy to improve the mastery of English language. This present findings give contribution especially to the learners so that they can learn English at their own pace. Also, it is beneficial for low achievers to improve their oral production skills by engaging with their peers during the processes

of learning. It is also useful for teachers, educational practitioners, policy maker, and the curriculum designers to design curriculum of English education enable multimedia supported immersive strategies to be applied.

Since, this method provides students with authentic learning lesson from speech multimedia input recorded from various native speakers spoken English. As a result, students can listen and watch the lesson either with their friends or alone outside classroom. They can use an ample time to practice listening and watching the clips on their own pace to improve their language skills. This finding is also expected to offer a solution for improving the quality of education particularly English language mastery in Aceh, and Indonesia in general.

1.8 Operational Definitions

In order to avoid misunderstanding of the terms used in this study, it is important to define them as follows:

a. Immersive multimedia learning

Immersive multimedia learning is the use video clips and passages extracted from the video clips to trigger learning processes that involve deep engagement, focused attention, and acquisition of the target language through the senses.

b. Peer Support

Peer Support consists of activities such as listening, assessing, giving feedback, correcting and discussing that a group member performs in assisting his or

her partner to acquire oral skills such as pausing, phrasing, stressing, intonation, rating, and integration in the contexts of reading and speaking

c. Oral production skills

Oral production skills refer to the ability to read and speak a language using the native speaker forms for pausing, phrasing, stressing, intonation, rating, and integration. Reading involves repeating or reciting passages following the presentation in the clips while speaking involves oral delivery in expressing meaningful responses that may go beyond the presentation in the clips.

d. Pausing

Pausing refers to the way of the reader and speaker voice is guided by punctuation. For example, short breath at a comma, full stop with voice going down at periods and up at question marks, and full stop at dashes.

e. Phrasing

Phrasing refers to the way of readers and speakers put words together in groups to represent the meaningful units of language. Phrased speaking sounds like oral language, though more formal.

f. Stressing

Stress refers to the emphasis readers and speakers place on particular words (louder tone) to reflect the meaning as speakers would do in oral language.

g. Intonation

Intonation refers to the way of the readers and speakers vary the voice in tone, pitch, and volume to reflect the meaning of the speech. It is sometimes called expression.

h. Rate

Rate refers to the pace at which a reader and speaker moves through the text. It is related to the process of not too fast and not too slow during the reading and speaking. The reader and speaker moves along steadily with few slowdowns, stops, or pauses to solve words. If the speaker has only a few short pauses for word solving and picks up the pace again, look at the overall rate.

i. Integration

Integration involves the way a reader and speaker consistently and evenly orchestrates rate, phrasing, pausing, intonation, and stress.

j. Motivation

Motivation is defined as the attribute that moves learner to do or not to do something in the language learning (Broussard & Garrison, 2004). Motivation in this study is measured by simplified Keller's (1988) questionnaire model that defines motivation in terms of attention, relevance, confidence, and satisfaction. This questionnaire is given to students after the treatment to measure their motivation.