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## The Effects of Immersive Multimedia Learning with Peer Support on English Oral Skills (Speaking and Reading)

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**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 at the effects of the immersive multimedia learning technique with peer support on performance in English in terms of 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. It also investigated were the effects on performance by students' achievement. 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. 80 first-year university students enrolled in 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. 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 students.

**Keywords:** Code switching, native speaker video, peer support, Immersive learning, English oral production skills, Students' achievements

### 1. INTRODUCTION

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. The processes of teaching and learning English at university level in Indonesia have been used various methods to achieve the goals. However, students are still difficult to communicate in English orally. Therefore, the writers offer an alternative teaching and learning English method through immersive multimedia learning with peer support to improve students' oral production skills in reading and speaking.

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, pronouncing, and reading English words correctly. This problem is endemic and covers English and non-English majors (Hamdi, 1998; Kweldju, 2002). The ways and methods to improve such situation are urgently needed.

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 (Wilkinson, 2006).

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 (Salaberry, 2001; Schwartz & Beichner, 1999; Brooks, 1997; Nguyen, 2008; Coiro, Knobel, Lankshear, & Leu, 2008; Chapelle, 2003; Larsen-Freeman & Freeman, 2008). 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). 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 (Alberta Education, 2010; Met, 1987). 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). The presence of peer support or social interaction in the learning English as a foreign or second language is important (Kagan, 1995; Levelt, 1993).

The research questions of this study are as follow (1) Are there significant differences in terms of oral production in (a) reading and (b) 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 oral production in (a) reading and (b) speaking among high achievement 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 oral production in (a) reading and (b) speaking among low achievement students who received immersive multimedia learning with peer support and those who did not receive such support?

## **TERMINOLOGY**

### **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.

## **2. LITERATURE REVIEW**

### **2.1 Levelt's (1989) Lexicon Model**

This study is based on 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. Levelt presents the process of improving language skill by using the lexicon model (Levelt, 1989). It

can be described that the process of mastering oral language production following Levelt's model is based on the significant input around the students. From the input they frequently receive, students will progressively develop protosyllabary, phonemization, lexical concepts, semantic structures, syntactization, and until they can produce the meaningful words and sentences in the appropriate contexts to communicate with (Levelt, 1989). Basic to this model is the recognition that immersion in L1 allows the creation of a building block of a language by creating a conceptual system involving lexical concepts, semantic structures and lemmas, syntactization, phonological codes, and an articulatory motor system that develops into parsing abilities (Levelt, 1989).

## **2.2 Code-switching approach**

The term of code switching refers to the ability of speakers to apply the structure of one language to another language when communicating with their partners who speak the same language. Code switching may not run well if the interlocutors do not speak the same language (Valdes-Fallis, 1977; Bista, 2010). However, it implies some degree of competence in the two languages even if bilingual fluency is not yet stable among the speakers of the language. The purposes of using code switching due to two important components that is filling a linguistic or conceptual gap and for other various communicative goals (Gysels, 1992). Code switching is the exception and viewed as a norm for multilingual and bilingual communities in many places and cases (Swigart, 1992; Goyvaerts & Zembele, 1992). In addition, Gumperz (1982) describes code switching as discourse an exchange which forms a single unitary interactional whole: Speakers communicate fluently, maintaining an even flow of talk. No hesitation pauses, changes in sentence rhythm, pitch level or intonation contour mark the shift in code. There is nothing in the exchange as a whole to indicate that speakers don't understand each other. Apart from the alternation itself, the passages have all the earmarks of ordinary conversation in a single language (Gumperz, 1982:60).

Code switching is one of the alternative approaches used in the teaching and learning a second or foreign language nowadays used by

teachers. The use of code switching in the teaching and learning process of L2 has attracted a considerable amount of attention among teachers and students (Gulzar, 2010). Code switching occurs in the L2 classroom teaching because it helps communication among the students and the teacher (Macoro, 2010; Gulzar, 2010; Crystal, 1997; Duran, 1994). There are three potential reasons for doing code switching from one language to another as presented by Crystal (1997). The first one is the notion that a speaker may not be able to express him/herself in one language so switches to the other to compensate his/her deficiency because of limited words to speak in the target language that enable speaker triggered into speaking in the other language for a moment. In addition, this type of code switching can take place when the speaker is upset, tired, or distracted in some manners. The second reason is when a speaker wants to express his solidarity with a particular group of people or social group. Many studies reported on the use of CS in the teaching and learning English as foreign or second languages. The findings showed that using code-switched form was considered less fluent, less intelligent, and less expressive than when using the target language directly (Stevens, 1983; Chana, 1984; Duran, 1994).

## **2.3 Immersive Strategies**

Immersion is a form of experiential learning where the learning processes involve deep engagement and absorption with the target language through all the senses. Immersion programs have been implemented in many countries such as United State, Canada, Spain, New Zealand, etc., with the purpose of improving students' second language acquisition and learning (Tallin, 2005; Cummins, 2000). Immersion is a relatively new development within bilingual education, but it is an option (and a term) that is being adopted more and more widely. Immersion programs aim to provide the quantity and quality of involvement in the use of target language that ensure the development of a high level of proficiency (Johnson & Swain, 1997).

Students acquire their first language relatively subconsciously. They are not aware that they are learning a language at home and their wider environment. Immersion strategies

attempt to replicate this process of second language acquisition and learning. Immersion program has been succeeded particularly when compared with second language subject teaching. Language immersion is a method of teaching a second language (L2) in which the target language is used as both curriculum content and media of instruction (Pacific Policy Research Center, 2010). The need to have immersion program for L2 or foreign language as a result of students' achievement are not significantly satisfied. Many students have studied English at school, but their ability to use the target language still far from the expectation. The focus of teaching learning process nowadays is on grammar, memorization, and drill had not provided them with sufficient skill to work in English or to socialize with English speakers (Johnson & Swain, 1997; Cummins, 1998; Tallin, 2005). They may have some or no exposure to the L2 outside school. Immersion programs were first instituted in Montreal, Canada, in 1965. The programs were created to provide English-speaking students in Quebec an opportunity to acquire Canada's two official languages – English and French. It is important to understand that English speakers are a minority in Quebec that comprise only 15% of the population of the province. Since 1965, immersion programs have been developed in a variety of other languages (e.g., Hebrew-English; Hawaiian-English; Mohawk-English; Japanese-English; Basque-Spanish; Swedish-Finnish) and for a variety of purposes (Johnson & Swain, 1997). In the context of Indonesian students, English language is considered as a first foreign language introduced at primary school up to tertiary level.

The general purposes of implementation English immersion for students of Indonesia following French immersion program in Canada. The goals can be simplified as follows: (1) It promotes of English language as a foreign language to be a second language. (2) It promotes as general educational, linguistic and cultural enrichment of the foreign/second languages. (3) It improves students' vocabulary, grammar, concepts, intonation and oral production of the English as a foreign or second language (L2). (4) It is a promotion of heritage /cultural language of the target language

(English or Indonesian, for instances). (5) It is a media of promotion of important international language in Indonesia. (6) It can be as maintenance and development of indigenous language (Indonesian, Acehnese, Javanese, etc.). (7) Understanding and appreciation of the culture of the home language group of the L2 is important (Cummins, 1998; Tallinn, 2005; Alberta Education, 2010). The goals of implementing multimedia immersive learning with Peer Supported are to enable learners to improve their second language learning in terms of oral production skills for reading and speaking based on various recorded native speakers input. Learners can practice the target language with their peers after accomplishing the session of the learning process. They can do that repeatedly without limitation of time, for instance. Also, learners can make all of their comments in class to one another and their teachers soon after they acquire basic proficiency in the target language (Tallinn, 2005). Therefore, they are encouraged and indeed expected to use the English once they have acquired basic proficiency in it to promote acquisition. The social interaction plays a crucial activity in the immersive learning (Cummins, 1998; Tallinn, 2005).

According to Johnson and Swain (1997) there are eight characteristics of immersion learning process: (1) The use of L2 is a medium of instruction. (2) The immersion curriculum should be parallels the local L1 curriculum. (3) Overt support exists for the L1. (4) The program aims at additive bilingualism. (5) The exposure to the L2 is largely confined to the classroom. (6) Learners enter with similar (limited) levels of L2 proficiency. (7) The teachers are bilingual proficiency. And (8) The classroom culture is that of the local L1 community (Johnson & Swain, 1997; Tallinn, 2005). By having this immersion learning, it is expected that learners to be bilingual. However, it is still questionable for the context of Indonesian to be reality. It is important for being success of any immersion learning. The resources are required to enable them to function adequately and the continued high level of commitment of all involved in the program from policy makers to teacher, environment, parents, administrators and students (Cummins, 1998).

The English immersion can be done by integrating of the target language and content area instructions. Learners learn English language about the English language through the target language (Tallinn, 2005; Alberta Education, 2010). The aim of learning the language is to enable learners to read, speak, write and listen in English. Learning about the target language is that learner study English as a subject. Learners learn through language is that they use English to solve problems, understand concepts and create new knowledge (Alberta Education, 2010). These three notions are interwoven throughout the students' English immersion experience. They learn the language as they are acquiring concepts in different subjects. As learners learn to read, they also read to learn (Alberta Education, 2010). Learners learn a second language to enable them to use the target language in meaningful context. In English immersion, learners are given opportunities to use for a variety of purposes. In the end, learning through language entails that all English lesson multimedia immersive strategies are also strategies of language. Students meet their outcomes identified for various lessons (Tallin, 2005; Alberta Education, 2010). It has been acknowledged that immersion pedagogy shares many features teachers use with first language learners (Alberta Education, 2010). In addition, Cummins says that the use of L1 by students is perceived as contravening the basic premises of immersion. It rarely happens to permit learners to use their first language (L1) in the activity for discussion. Learners should use the target language during the processes teaching and learning in the classroom (Cummins, 1998). In this case, the approach serves as a crucial catalyst to motivate students and to establish a secure climate that encourages them to take risks as they learn English and subject matter through English. The different learning styles and intelligences of students will also take into consideration the English immersion programs.

#### **2.4 Immersive Multimedia Learning**

The immersive multimedia method in this study uses multimedia immersion program. It means that the target language (English) is as the main instruction in the process of teaching and learning activities (Lenker & Rhodes,

2007). The program is designed for first year university students. This method of teaching and learning English or any language in this world has been used for more than thirty five years (Cummins, 2000; Lenker & Rhodes, 2007). During the time, the teacher plays an important role in the teaching and learning process. Teacher is as a model of presenting teaching and learning materials in the classroom (Cummins, 2000; Tallin, 2005; Lenker & Rhodes, 2007; Alberta Education, 2010). However, in the current study, the role of teacher is limited. Teacher is a facilitator or an organizer in the classroom. The students do activities either in the classroom or outside the classroom to immerse themselves by listening and watching video clips and recordings provided by teacher. The students may learn with or to master the contents of the learning materials.

The implementation of immersive learning strategy in English and other languages has been used for more than thirty five years (Cummins, 2000; Lenker & Rhodes, 2007). In this strategy, the teacher plays an important role in the teaching and learning process. The teacher is as a model and presents teaching and learning materials in and outside the classroom (Cummins, 2000; Tallin, 2005; Lenker & Rhodes, 2007; Alberta Education, 2010). However, in the current study, the role of teacher is limited to being a facilitator and the delivery of the language lessons is conducted through the use of multimedia elements. The students do activities either in the classroom or outside the classroom to immerse themselves by listening and watching video clips and recordings provided by teacher. The students may learn with or master the contents of the learning materials. The multimedia supported in the form of video clips and recoding materials would be as the fundamental input. Students may repeat the playback several times to absorb each learning material from the clips and recordings until they master them naturally so that they can reproduce the language as accurately accordingly to the native speakers.

#### **2.5 Peer Support and Language Learning Environment**

Linguists and language teachers have conducted studies that related to the implementation of Peer Support strategies in

language learning (Angelova, Gunawardena, & Volk, 2006; De Guerrero & Villamil, 2000; Emerson, Rees, & Mackay, 2005; Ertmer et al., 2007; Li, 2009). Li (2009) who conducted a study on peer interaction in an EFL classroom in Hong Kong to improve students' performance. The study found that student-student interaction, the learners jointly construct a scaffold that allows them to successfully complete the activity and co-construct their own system of making meaning through words in a second language. In addition, support in peer support may confine the development of ZPD, there appears to be a necessary role for an expert (e.g., the teacher) or a more capable peer who can manage the interaction well, model appropriate forms and monitor the learners' production in a proper way. As peer mediation is not always effective, expert mediation is required on occasions when peers find it difficult to push their ZPD. Meanwhile, social interaction can contribute to language learning and the extension of ZPD only when there are opportunities for students to offer assistance or digest prompts, under meticulous, proper use of scaffolding strategies and appropriate feedback from the teacher or peers (Li, 2009). This study focused on speaking to negotiate meaning and form with peer interaction. Many studies have been by language researchers that the use of multimedia immersive learning improves students' language skills in terms of reading and speaking (Kuo (2009; Echandy, 2011; BavaHarji, 2014; Kabilan et al., 2010; AbuSeileek, 2007; Shih, 2010; Wu, 2013; Diyyab, 2013; Kessler, 2010; Murat, 2012).

However, few studies have been conducted in terms of improving oral production skills through peer-supported multimedia strategy among low and high achievers. Grgurovic (2007) who conducted a research in terms of using multimedia with subtitle and peer interaction to improve language oral production skills among high and low achievers. The study found that the use of subtitles and transcripts through multimedia supported improved achievement among high achievers than low achievers. The finding also reported that the higher proficiency group used subtitles more frequently and for longer amounts of time than the lower proficiency group although both

groups exhibited very similar behaviour on transcripts. Another study by Pujola (2002) and Aslan (2009), who investigated the use of multimedia lesson with subtitles to improve language skills among high and low achievers found that participants in each group had different ways of learning the language. It was difficult to draw conclusions that would apply to all participants in one group especially since some participants in the lower group never used textual help. The study also reported that generally, the high achievers used the replay and rewind functions more than the transcripts and or subtitles.

### **3. METHODOLOGY**

#### **3.1 Research Design**

This is a quantitative study in nature that uses experimental teaching and learning to first year university students in Aceh.

#### **3.2 Population and Sample**

The population of the study were 80 first year of English department students, Syiah Kuala University, Banda Aceh, Indonesia. All the students were under 18-20 years of age. All the population would be the sample of the study from four existing classes at Syiah Kuala University English department, Banda Aceh. Intact classes were used and both classes used the immersion program. The researcher checked for equivalence in English achievement in Indonesian National Examination by class and gender, and by gender in each class. The results found that there were no significant differences between the classes. From the sample, 40 students were assigned as immersive learning with peer support (high & low achievers) and 40 students assigned as immersive learning without peer support (high & low achievers). One class employed peer support activities with pair group formed based on students' choice of partners. The other group worked without peer.

#### **3.3 Procedures of Data Collection**

The lessons were assembled from video clips involving native speakers that were downloaded from YouTube and other websites. In order to get the validity of the instruction used in this study, the packages were submitted for evaluation to two senior English lecturers at the English Department, Syiah Kuala University, Banda Aceh. They evaluated the contents of the

clips to ensure that the clips were suited to the course level and needs.

The research instruments of this study consisted of test (post-test). At the end of the treatment, post-test was conducted to investigate if the treatment using immersive multimedia learning with peer support and without peer support improves students' performances. The post-test covered oral production in reading and speaking for pausing, phrasing, stress, intonation, rate, and integration aspects. Oral production (fluency test of reading and speaking) abilities were tested orally and recorded in order to offer the researcher better reference to analyse the data. The oral production skills post-test for reading and speaking were based on the topics being learned by both groups. The post-test for speaking was conducted by interviewing students one by one. There were 10 questions in the interview and all were taken from the topics being learned from the video lessons.

### 3.4 Procedure of Data Analysis

The data from pre and post-tests, and questionnaire were analysed by using descriptive and inferential statistical methods involving one-way ANOVA. The results of post-test were analysed based on the assessment rubric that was developed to assess students' oral production. The students' performance in the oral production tests was recorded to ensure the data collected were correct and valid.

## 4. FINDINGS AND DISCUSSIONS

### 4.1 Findings

#### Research question 1

Are there significant differences in terms of oral production in (a) reading and (b) speaking between the students who received immersive multimedia learning with peer support and those who did not receive such support?

(a) Table 1 reports the means, standard deviations, and results of ANOVA for oral production in reading by treatment. Students in the peer-support group reported higher mean scores for all dimensions of oral production and results of the ANOVA tests reported significant differences, i.e., that  $p < .05$  for all the sub-factors. Thus, the findings indicate that the peer support strategy significantly improved oral production in reading for pausing, phrasing, stress, intonation, rate, and integration.

Table 1. Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment

Aspects	Groups	N	Mean	Std. Deviation	ANOVA
Pausing	With support peer	40	7.15	.69	F (1,78) = 6.382 p = .014
	W/O support peer	40	6.70	.88	
Phrasing	With support peer	40	6.95	.87	F (1,78) = 9.889 p = .002
	W/O support peer	40	6.27	1.03	
Stress	With support peer	40	6.85	.89	F (1,78) = 14.224 p = .000
	W/O support peer	40	6.07	.94	
Intonation	With support peer	40	7.72	.75	F (1,78) = 18.676 p = .000
	W/O support peer	40	6.87	.99	
Rate	With support peer	40	7.07	.69	F (1,78) = 12.519 p = .001
	W/O support peer	40	6.45	.87	
Integration	With support peer	40	7.67	.82	F (1,78) = 17.022 p = .000
	W/O support peer	40	6.92	.79	

(b) Table 2 reports the means, standard deviations, and results of ANOVA for oral production in speaking by treatment. Students in the peer-supported group reported higher mean scores for all dimensions of oral production and the results of ANOVA tests reported significant differences, i.e., that  $p < .05$  for all the sub-factors. Thus, the findings indicate that the peer-supported strategy significantly improved oral production in speaking for pausing, phrasing, stress, intonation, rate, and integration.

Table 2. Means, Standard Deviations, and results of ANOVA for Oral Production in Speaking by Treatment

Aspects	Groups	N	Mean	Std. Deviation	ANOVA
Pausing	With support peer	40	6.75	.77	F (1,78) = 11.919 p = .001
	W/O support peer	40	6.17	.71	
Phrasing	With support peer	40	6.37	.70	F (1,78) = 44.892 p = .000
	W/O support peer	40	5.37	.62	
Stress	With support peer	40	5.95	.87	F (1,78) = 21.774 p = .000
	W/O support peer	40	5.20	.51	
Intonation	With support peer	40	6.65	.80	F (1,78) = 29.885 p = .000
	W/O support peer	40	5.65	.83	
Rate	With support peer	40	6.80	.68	F (1,78) = 47.561 p = .000
	W/O support peer	40	5.80	.60	
Integration	With support peer	40	7.22	.65	F (1,78) = 16.571 p = .000
	W/O support peer	40	6.17	.67	

### Research question 2

Are there significant differences in terms of oral production in (a) reading and (b) speaking among high achievement students who received immersive multimedia learning with peer support and those who did not receive such support?

(a) Table 3 reports the means, standard deviations, and results of ANOVA for oral production in reading by treatment and high English achievement. High achievement students in the peer-supported group reported similar mean scores for all dimensions of oral production in reading and the results of ANOVA tests reported no significant differences, i.e., that  $p > .05$  for all the sub-factors. Thus, these findings indicated that the peer-supported strategy did not significantly improve oral production in reading for pausing, phrasing, stress, intonation, rate, and integration among high English achievers.

Table 3. Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment and high English achievement

High English Achievement					
Aspects	Groups	N	Mean	Std. Deviation	ANOVA
Pausing	With peer support	12	7.00	.85	F (1,24) = .057 p = .814
	W/O peer support	13	6.92	.75	
Phrasing	With peer support	12	6.83	.83	F (1,24) = .127 p = .725
	W/O peer support	13	6.69	1.10	
Stress	With peer support	12	6.58	.79	F (1,24) = .768 p = .390
	W/O peer support	13	6.23	1.16	
Intonation	With peer support	12	7.33	.65	F (1,24) = .283 p = .600
	W/O peer support	13	7.15	.98	
Rate	With peer support	12	7.00	.60	F (1,24) = 1.917 p = .180
	W/O peer support	13	6.61	.76	
Integration	With peer support	12	7.50	.90	F (1,24) = .601 p = .446
	W/O peer support	13	7.23	.83	

(b) Table 4 reports the means, standard deviations, and results of ANOVA for oral production in speaking by treatment and high English achievement. High achievement students in the peer-supported group reported consistently higher mean scores for all dimensions of oral production in reading and the results of ANOVA tests reported significant differences, i.e., that  $p < .05$  for all the sub-factors. Thus, H2cS is accepted. These findings indicate that the peer-supported strategy significantly improved oral production in speaking for pausing, phrasing, stress, intonation, rate, and integration among high English achievers.

Table 4. Means, Standard Deviations, and results of ANOVA for Oral Production in Speaking by Treatment and High English Achievement

High English Achievement					
Aspects	Groups	N	Mean	Std. Deviation	ANOVA
Pausing	With peer support	12	6.91	.79	F (1,24) = 8.945 p = .007
	W/O peer support	13	5.92	.86	
Phrasing	With peer support	12	6.50	.67	F (1,24) = 26.261 p = .000
	W/O peer support	13	5.30	.48	
Stress	With peer support	12	6.16	.83	F (1,24) = 12.961 p = .002
	W/O peer support	13	5.15	.55	
Intonation	With peer support	12	6.75	.75	F (1,24) = 17.674 p = .000
	W/O peer support	13	5.46	.77	
Rate	With peer support	12	6.75	.62	F (1,24) = 28.161 p = .000
	W/O peer support	13	5.53	.51	
Integration	With peer support	12	7.16	.57	F (1,24) = 19.842 p = .000
	W/O peer support	13	6.07	.64	

### Research question 3

Are there significant differences in terms of oral production in (a) reading and (b) speaking among low achievement students who received immersive multimedia learning with peer



support and those who did not receive such support?

(a) Table 5 reports the means, standard deviations, and results of ANOVA for oral production in reading by treatment and low English achievement. Low achievement students in the peer-supported group reported consistently higher mean scores for all dimensions of oral production in reading and the results of ANOVA tests reported significant differences, i.e., that  $p < .05$  for all the sub-factors. Thus, H3cR is accepted. These findings indicated that the peer-supported strategy significantly improved oral production in reading for pausing, phrasing, stress, intonation, rate, and integration among low English achievers.

Table 5. Means, Standard Deviations, and results of ANOVA for Oral Production in Reading by Treatment and Low English achievement

Low English Achievement					
Aspects	Groups	N	Mean	Std. Deviation	ANOVA
Pausing	With peer support	28	7.21	.62	F (1,54) = 8.473 p = .005
	W/O peer support	27	6.59	.93	
Phrasing	With peer support	28	7.00	.90	F (1,54) = 13.622 p = .001
	W/O peer support	27	6.07	.95	
Stress	With peer support	28	6.96	.92	F (1,54) = 16.536 p = .000
	W/O peer support	27	6.00	.83	
Intonation	With peer support	28	7.89	.73	F (1,54) = 24.258 p = .000
	W/O peer support	27	6.74	.98	
Rate	With peer support	28	7.10	.73	F (1,54) = 10.695 p = .002
	W/O peer support	27	6.37	.92	
Integration	With peer support	28	7.75	.79	F (1,54) = 21.575 p = .000
	W/O peer support	27	6.77	.75	

(b) Table 6 reports the means, standard deviations, and results of ANOVA for oral production in speaking by treatment and low English achievement. Low achievement students in the peer-supported group reported consistently higher mean scores for all dimensions of oral production in reading and the results of ANOVA tests reported significant differences, i.e., that  $p < .05$  for all the sub-factors. Thus, H3cS is accepted. These findings indicate that, the peer-supported strategy significantly improved oral production in speaking for pausing, phrasing, stress,

intonation, rate, and integration among low English achievers.

Table 6 Means, Standard Deviations, and results of ANOVA for Oral Production in Speaking by Treatment and Low English Achievement

Low English Achievement					
Aspects	Groups	N	Mean	Std. Deviation	ANOVA
Pausing	With peer support	28	6.67	.77	F (1,54) = 4.136 p = .047
	W/O peer support	27	6.29	.60	
Phrasing	With peer support	28	6.32	.72	F (1,54) = 22.858 p = .000
	W/O peer support	27	5.40	.69	
Stress	With peer support	28	5.85	.89	F (1,54) = 10.453 p = .002
	W/O peer support	27	5.22	.50	
Intonation	With peer support	28	6.60	.83	F (1,54) = 14.443 p = .000
	W/O peer support	27	5.74	.85	
Rate	With peer support	28	6.82	.72	F (1,54) = 24.384 p = .000
	W/O peer support	27	5.92	.61	
Integration	With peer support	28	7.25	.70	F (1,54) = 29.693 p = .000
	W/O peer support	27	6.22	.69	

## 4.2 Discussion

Analyses of the data by treatment methods found that the immersive multimedia learning technique with peer support significantly improved oral production in reading and speaking for pausing, phrasing, stress, intonation, rate, and integration. This finding consisted with Bava Harji, 2014; Kabilan et al., 2010; Abu Seileek, 2007; Shih, 2010; Diyyab, 2013; Kessler, 2010; Murat, 2012). The group with peer support group reported greater success on the learning outcomes compared to the individual group because of the immediate feedbacks and corrections or additional coaching from their partners to refine their mastery of the language. Students in the individual group did not improve oral production skills for reading and speaking during learning activities because they did not receive immediate feedback and corrections or additional coaching to refine their mastery of the language.

Analyses by English achievement and treatment methods found that the peer support strategy significantly improved oral production in reading for pausing, phrasing, stress, intonation, rate, and integration among low English achievers but not high achievers. Also, the peer support strategy significantly improved oral production in speaking for pausing, phrasing, stress, intonation, rate, and integration among high and low English achievers. The study found that the peer support strategy

significantly improved oral production in reading for pausing, phrasing, stress, intonation, rate, and integration among low English achievers but not high achievers. Many studies have been conducted to investigate the improvement of oral production skills through peer supported multimedia strategies (Pujola, 2002; Aslan, 2009; Kabilan et al., 2010; Shih, 2010; Kessler, 2010; Murat, 2012; Wu, 2013; Diyyab, 2013; BavaHarji, 2014), however, few studies have reported their effects among low and high achievers. The finding of this study contradicts a previous study by Grgurovic (2007) who conducted a research in terms of using multimedia with subtitle and peer interaction to improve language oral production skills among high and low achievers.

From the present findings it can be concluded that the immersive peer supported multimedia package was very beneficial for low ability students as indicated by significant improvements on both speaking and reading oral production. It is also useful for high ability students for improving their speaking skills but this finding must be taken with caution as the sample size for high ability students was not large enough for robust statistical inferences to be made. Further studies are recommended to clarify the real outcomes for high ability students.

## 5 CONCLUSION

This study investigated the effects of multimedia supported immersive learning with and without peer-support to improve students' performances in term of oral production skills for reading and speaking. 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.

These findings showed that the immersive multimedia technique with peer support that employed the L1 theory 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.

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