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The Effect of Visual Cues in Listening Comprehension: Pedagogical Implications for Non-Native Speakers of English

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The Effect of Visual Cues in Listening Comprehension: Pedagogical

Implications for Non-Native Speakers of English

by

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Abstract

Rubin (1994) stresses the value of visual support in listening comprehension and cites several studies including her own in favor of using videos in language classrooms. Hoven (1999) correlates listening comprehension to visual comprehension and argues that LC and VC are complementary and should both be incorporated in teaching listening and speaking in L2. Furthermore, gestures play a significant role of mediator in the language learning process (McCafferty, 2004), and technology offers multiple ways to introduce input in language classrooms (Rost, 2007). A listening comprehension task was designed to compare three different modes of input in a listening and speaking class among a group of 33 English language learners. All three groups wrote a recall after listening twice to the same audio-text. The control group did not benefit from any visual support, while experimental 1 could see the video of the speaker using gestures and facial cues. Experimental 2 group watched a PowerPoint presentation where the oral input was enhanced with pictures and some text. The pictures represented each example cited in the presentation. The analysis comprised in a T-test to compare the recall students wrote individually in each group, and a Chi-square test to compare the number of examples cited in students' recalls per group. The T-test did not show any significant results to form a claim in favor of one mode of input over the other. However, a Chi-square tests which compared the number of examples cited per group indicated that there is a relationship between the number of examples and the various groups according to each treatment. This study strongly suggests that supporting oral input with pictures is highly recommended. In fact, the results show that students who were given specific examples

accompanied with pictures, were the only group where some participants successfully cited all the examples mentioned in the presentation.

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"Please listen carefully and try to hear what I am not saying."
Finn, 1966

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Chapter I: Introduction

Introduction

There are many different ways to think about listening in L2, as there are many different ways to acquire the skills of listening in second language acquisition; thus, the permanent and crucial need to use multiple strategies in second language instruction in order to meet students' needs.

Indeed, as complex as language acquisition may be, listening falls under the same type of complexity, and it is difficult to isolate it from the entire process of acquiring a new language. Listening occurs in various situations and at different levels. Speech is often delivered using multiple ways of communication and comes from different speakers using their own personal way of communicating and interacting with others. Therefore, learners may be passive listeners in some situations such as lectures, watching movies, etc.; while they act as active participants in a conversation or a debate. In order to be able to communicate efficiently, or at least to understand what is being said, learners need to acquire the tools to decode what they hear and infer meaning regardless of the setting in which they may be. From a language teaching perspective, listening has been a challenging skill to teach, and remained ignored for a long time. It was considered a tool to convey content in the classroom, but never a tool in itself. Learners who lacked listening proficiency were not identified and their lack of comprehension hindered their language acquisition (Field, 2008).

Fortunately, listening comprehension status has evolved and is recognized as one of the major components in learning a second language. As a matter of fact, it is also equally

important in first language acquisition and literacy. In his analysis of the listening skill,

Buttery (1980) describes listening as follows:

> Listening, the recognition and interpretation of auditory stimuli is accepted as one of the most important features of children's learning…Listening skills are generally considered one of the four major components of language arts (the others being speaking reading, and writing). However, it is widely recognized that the ability to listen attentively and critically is generic to children achieving success in all academic areas as well as life in general. (p. 181)

Similarly, listening is just as important in the language classroom and as crucial for language learners as it is for children. As technology has evolved, teaching listening and speaking has also evolved drastically. While technology has made its way in classrooms, the means to introduce oral input to students has shifted from the standard audio input to a more elaborate mode, mixing videotaped lectures and video clips, along with PowerPoint presentations and so on. With a growing interest towards listening comprehension and what type of oral input serves best language learners, this research answers the following question: In a listening comprehension task, do visuals help or rather hinder learners listening comprehension and recall abilities?

To answer this question I used three distinctive mediums in language classrooms to introduce oral input to students in order to assess their listening comprehension proficiency and recall abilities. So, the first step in this research was to present students with a listening/recall task among three different groups who listened to the same audio content presented in three different way:

1. Group 1 (Control group): simple recording with no text or images.

2. Group 2 (Experimental 1): same recording + video of speaker using facial cues and gestures.

3. Group 3 (Experimental 2): same recording + PowerPoint presentation that included text and pictures.

The first section of this paper discusses the current and not as current, yet relevant literature and research findings in L2 listening comprehension. It is followed by a methodology section in which I explain how this research was conducted, who the participants are, in which setting and under what conditions the data was collected, analyzed, and interpreted. Section 3 will present the results and the analysis of the findings, and the final component of this paper is the discussion section which includes limitations and conclusion. The materials used to conduct this project are added in the appendices section.

Chapter II: Literature Review

This study will investigate the relevance of visual support in a listening comprehension classroom among English second language learners. Listening occurs in different settings, but for a long time, oral information was presented via audio input solely in language classrooms; however, attention is growing about the effect of visual cues whether they comprise authentic communicative style involving facial cues and gestures, or the use of technology with pictures, videos, text to go along with the oral input. This literature review will start with a Listening comprehension research review, and then will extend to three different aspects of listening comprehension strategies used in language classrooms:

- Listening Comprehension Versus Visual Comprehension

- The role of gestures and facial cues in Listening Comprehension

- Technology in The Language Classroom

Second Language Listening Comprehension Research Review

The interest of language experts in L2 listening comprehension has generated a large body of research, and several factors involved in listening have been investigated. In a review of Second Language Listening Comprehension Research, Rubin (1994) cites several studies and constructs her article around some major factors involved in listening comprehension and the characteristics of each one of them. The first point of interest Rubin describes is related to speech and its features. She highlights the importance of speech and how it is conveyed to allow comprehension and retention of information. Another aspect described in this literature review is about listeners and how their level of proficiency can affect their listening abilities along with few studies dealing with working memory, age, and background knowledge. More

challenging yet very interesting is language processing during a listening task. At last, and for the purpose of this study, it is important to mention that in this article, Rubin (1994) stresses the value of visual support in listening comprehension and cites several studies including her own in favor of using videos in language classrooms.

Listening Comprehension versus Visual Comprehension

Making reference to Rubin's article, Hoven (1999) correlates listening comprehension to visual comprehension and argues that LC and VC are complementary and should both be incorporated in teaching listening and speaking in L2. Technology has evolved and the use of visual media will bridge visual comprehension to listening comprehension to help learners listen to oral input while negotiating meaning from visual cues. She also makes reference to gestures and body language as a significant part of the visual input learners receive while listening (Hoven, 1999). For instance, in a study conducted by Driskell and Radke (2003), which involved eighty participants who were all native speakers of English, the results showed that albeit the fact that gestures helped speakers produce effective speech, they also undeniably assisted listeners in perceiving more indicative information to access better understanding.

The Role of Gestures and Facial Cues in Listening Comprehension

Furthermore, McCafferty (2004) studied the case of a second language learner of English and videotaped several interactions of a Taiwanese student with a native speaker of English over a period of 8 months. The results clearly suggested that gestures played a significant role of mediator in the language learning process (McCafferty, 2004). It is difficult to ignore the role of gestures and body language and how it serves a communicative

function and central role in second language learning. As a matter of fact, Gullberg and McCafferty (2008) argue that for a long time, the study of gestures fell under the umbrella of a "paralinguistic mode of interaction, with the paralinguistic label given on the assumption that gesture is not part of the core meaning of what is rendered linguistically" (Gullberg & McCafferty, 2008, p. 133). However, based on factual research, a growing number of language specialists now consider body language as one the most crucial and essential part of authentic speech (Gullberg & McCafferty, 2008).

Moreover, Sueyoshi and Hardison (2005) urged for the need to investigate further the role of body language in communication, and called for more studies on gestures and facial cues as they established a strong correlation between listening comprehension and gestures. In their study, they compared the scores of 42 language learners during a listening comprehensions task. First, they videotaped a lecture choosing carefully an unfamiliar topic in order to eliminate the possibility that the participants may draw meaning from their background knowledge to answer the comprehension questions. The participants were randomly assigned to three groups. They all listened to the same oral input in three different modes of presentation: audio, video showing the speaker talk without using any type of gestures and video with gestures and facial cues. The results indicated that the group who watched the video with gestures scored higher than the two other groups. The scores also showed that the lower level participants benefited the most from gestures and visual cues. These findings suggest that gestures and facial cues are significantly important in helping language learners infer meaning from speech, and most importantly, they are crucial for lower level learners who rely on those cues to attain better comprehension (Sueyoshi &

Hardison, 2005). Gestures and body language are very closely related to listening and language learning. For example, TPR (Total Physical Response) is based on the correlation between gestures and listening comprehension. The purpose is to be able de understand oral input and demonstrate comprehension of the direction trough physical response (Nunan, 1999).

Technology in the Language Classroom

From a teacher's perspective it is crucial to be informed and to be attentive to all aspects of language acquisition. Becoming aware of the contributing factors and strategies second language learners rely on during the process of acquiring their L2 are part of teachers' role and responsibilities towards the students. Learners use strategies to interpret the oral input they listen to in a classroom (Field, 2008). Defining those strategies is beyond the scope of this research; however, taking into account the features that may be strategically used by second language learners in a listening activity is directly related to this study. If research on body language suggests that gestures and facial cues assist learners in understanding and making sense of what they hear (Cassell, McNeill, & McCullough, 1998), it would also be interesting to investigate the use of videos during a listening comprehension activity in the language classroom from a broader perspective. In 1974, Weston and Friedlander conducted a study among 247 young children between the ages of five to nine to compare the effect of using several modes of delivering oral input, and how it would affect children's comprehension. The results showed a clear advantage for using videos to aid students' comprehension while the mode of presentation that had the least impact and scored the lowest among the three groups was the use of audio input alone without any visual support.

The use of technology in a listening comprehension classroom is beyond crucial and goes back to the invention of the cassette in the 1960s (Sha, 2010).

With the technological evolution, teachers have more tools at hand in today's world than they did 40 years ago. Computers have revolutionized many aspects of our lives and have made a significant contribution to education and language learning. Multimedia learning environments as described by Jones and Plass (2002) have the potential to assist learners during listening comprehension activities by adding written text and images to oral input to create more connections in the learners' mind to build and retrieve information. For instance, Hulstijn (2003) compared two major movements in the cognitive science: connectionism and symbolism to show the link between "the connectionist models of language processing and listening skills" (Hulstijn, 2003, p. 413). He argued that besides the importance of both types of language processing that learners need to develop to be able to infer meaning; multimedia components add to the value of input by allowing dual modes of processing and help learners connect linguistic features in their minds.

In many aspects, listening comprehension has become strongly tied to technology. For example, most standardized tests such as the TOEFL have become computerized or at least offer a computerized version of what used to be the traditional paper based exams. Therefore, it is safe to think that the listening comprehension component would be the most affected by the use of technology. Indeed, the listening comprehension section of these tests consists of visual information along with oral input. It combines still pictures, such as charts and graphs related to the content, or videos of people interacting in normal settings to introduce conversations and dialogues for the purpose of the listening comprehension task (Ginther,

2002). As a matter of fact, Wagner (2007) argues that the inclusion of non-verbal input in

listening tests serves two functions. Those two functions reside in the fact that they provide

authentic situations in which speech may have occurred. They also help test takers infer

meaning from visual input rather than oral input alone. He argues that since listening in L2

has evolved with technology and since the use of videos in language classrooms has become

more predominant, researchers have established that when oral input is introduced with

visual input, listeners are more likely to infer greater meaning. So hence, the lack of visual

input during a listening task seems to hinder comprehension or at least puts more limitations

on learners' ability to infer meaning using several sources as it is the case when non-verbal

communication is introduced (Wagner, 2007). From a similar perspective, Ockey (2007)

conducted a research to investigate the effect of *Still Image and Video in Computer-Based*

Listening Tests. Although, the results of the study did not indicate a significant effect of still

image on listening comprehension in the context of testing, it did not deny the importance of

visuals in listening comprehension. In fact, the results indicated that non-verbal cues are

highly significant and that listeners use non-verbal communication such as "lip movements,

facial gestures, and other body language to construct meaning."(Ockey, 2007, p. 532).

Another interesting aspect researchers have questioned in second language listening

comprehension is the use of digital stories and their effect on language learners. Verdugo and

Belmonte (2007) obtained significant results supporting the positive effect of digital input

and the use of images to accompany oral input in order to gain comprehension. They

concluded their study with the following suggestion: "lesson plans and didactic guidelines

based on digital content would be very useful for full-time school teachers and instructors.

Multimedia content can be integrated with the dynamics of conventional methodologies and instructional practices." (Verdugo & Belmomte, 2007, p. 97). On the same note, Grgurovic and Hegelheimer (2007) made a clear recommendation towards designing materials for teaching listening comprehension incorporating new technologies and multimedia components. Their investigation focused on the use of help by language learners in a listening task and showed that those who used subtitles performed better than those who did not. However, they also underlined the fact that language learners may benefit from a broader type of help based on their learning styles (Grgurovic & Hegelheimer, 2007). Given this insight, it is crucial to highlight that the use of videos during a listening comprehension activity offers multiple choices. One single help option may not benefit all students at once. However, using diverse modes of non-verbal cues such as still images, gestures and body language, and so on may present better results on a long term, if the needs of learners are met in terms of learning styles. Another important matter is the use of authentic material. Technology does not exclude the importance of presenting learners with authentic oral input (Robin, 2007). It helps learners develop listening strategies by inferring meaning using different channels and associating visual resource to oral input. Seo (2002) studied the effect of visuals on listening comprehension and the results he obtained revealed that learners who are presented with visuals during a listening comprehension activity are more likely to use top-down processing, while those presented with audio input alone tend to rely on their bottom-up processing (Seo, 2002). This might be highly important for more advanced students who already have basic knowledge of the target language and need to develop their listening skills.

Of course there are many other studies in second language acquisition that investigated the role of visual input in listening comprehension. It is quite difficult to include all of them in this review; however, it appears that there is a consensus about the effectiveness of visual input and technology in language learning in general and listening comprehension in particular. Teachers have several options to choose from using videos in language classrooms. The best way to describe the advantages of technology is to borrow Rost (2007) words:

> One of the very exciting aspects of teaching listening is that so many aspects of instruction, both classroom instruction and self-access instruction, can be enhanced by technology. We are now better able to offer learners the most suitable kinds of input and provide effective forms of presentation and scaffolding. We can isolate, slow down, and manipulate listening processes in order to provide specific interventions that will actually help our learners become better – more motivated and more curious– listeners. (p. 106)

It is quite subsequent that researchers have argued that visual cues play a crucial role in helping listeners grasp more meaning and attain a better interpretation of what they hear. Visual comprehension has become inherent to listening comprehension with the development of technology and visual media (Hoven, 1999). With this in mind, it would be interesting to investigate the effect of visual comprehension on listening comprehension using three different modes of oral input.

Audio texts were used for a long time before technology offered other ways to introduce sound files to listeners in language classrooms. Computers have revolutionized education as much as they have changed almost every aspect of the modern life. For the purpose of this study, and in order to investigate the effect of visual input learners may receive during a listening comprehension task, the same text will be used in three different

ways. The "old fashioned" way of oral input as it was introduced in language classrooms in the mid-1960s (Sha, 2010), in other words, audio text without any visuals. On the other hand, the same text will be used in combination with visual information. The visual input will be of course significantly related to the acoustic text for the purpose of a listening comprehension activity. This visual information should help assist learners in building meaning from what they see as they listen.

As this literature review suggests, a large body of research in the field of second language listening comprehension recommends using several means of oral input (Rost, 2007) in order to improve learners' abilities. For further investigation on this matter, this study compares three different means of input in a second language listening and speaking classroom in order to understand how each mode supports students' comprehension and recall abilities.

Research Question

1. In an L2 listening comprehension classroom, does visual support to verbal content improve or rather hinder learners listening comprehension and recall abilities?

Chapter III: Methodology

Participants

All the participants in this study are non-native speakers of English. They come from different cultural and ethnical backgrounds, and are between the ages of 18 and 25. All students have had significant instruction in English as a second language, and are considered advanced language learners. Nevertheless, these students have not passed the proficiency English test to be fully admitted at a North American university without having to satisfy specific language requirements in order to develop the areas in which they need to improve.

In this instance, these students are required to take and pass an English speaking and listening class offered through College ESL. The total number of participants for this study is 33 divided into three groups:

Control group = 10

Experimental group 1 = 9

Experimental group 2 = 14

Materials

In order to answer the research question, a quantitative method was used to measure the effect of three different types of oral input on students' comprehension and recall skills. Students were divided into three groups.

The control group listened to a presentation about the role of social media in marketing. They listened to the presentation twice, and were directed to write a recall as detailed and complete as possible about the content of the presentation. The control group did not benefit from any type of visual support during this task.

Experimental group 1 listened to the same presentation twice and students were instructed to complete the exact same written assignment. This group however, received the information in a form of a video where the presenter could be seen. The presenter used noticeable facial cues and gestures while delivering the content of the presentation to emphasize its content.

Experimental group 2 followed the same instructions. First, listening twice to the presentation, then, wrote a recall, however, this time, the lecture was in a PowerPoint presentation format, and text as well as images were projected on the screen for students to follow along with the listening part.

Needless to say that the voice behind all three presentations was the same. In fact, the audio from the video presented to Experimental group 1 was used in the control group setting, and likewise, used to create the PowerPoint for Experimental group 2.

Also, all 3 groups were given the same amount of time to complete the task in identical classroom settings within the same week.

The text used for this listening activity was retrieved from a website "www.about.com", and the main reason for choosing it is that:

- One, it was used in previous semesters in similar classroom settings and has proven to be effective and at the level of our students,

- The topic is familiar to our learners, as research suggests that background knowledge is key for L2 learners in any type of language learning activity.

Once collected, the data analysis focused on 2 different aspects:

The first part of the analysis, compared the writing samples in each group by scoring them based on the number of T-Units. A T-unit is a linguistic term first introduce by Hunt (1965) to describe "each unit that is grammatically capable of being considered a sentence" (p. 37). For this part of the research, a T-test was run, and we will discuss the result in the section below.

This study also looked into more specific details, and focused on the number of examples of people and companies who use social media for their marketing approach who were mentioned in the presentation. A count of the number of examples students were able to cite in each group allowed for more specific information about students' comprehension and recall abilities based on the type of oral input they received. There was a total of four examples mentioned in the presentation. A Chi-square test was run for this section of the study to compare the number of examples cited in each group.

Chapter IV: Analysis and Results

A number of statistical tests were run in order to examine the differences between the three different modes of oral input at two different levels:

First, a T-Test to compare the number of T-units in each group,

Two, Chi-square tests to draw analysis from the number of examples cited by students in each group, and what significance this may have based on the type of visual support during the listening task.

T-test

The goal for running this test is to compare the means between groups based on a level of confidence of 95%. My expectation is that there may be a significant difference in the means based on the condition for each group. The hypothesis for the T-Test is established as follows:

Condition 1: Control group vs. Experimental 1:

Ho: C = E1
HA ≠
t = -.436   sig = .668

Table 1

Group Statistics

Group	N	Mean	Std. Deviation	Std. Error Mean
controlGroup	10	8.30	4.373	1.383
Tunits Experimental 1	9	9.11	3.655	1.218

Table 2

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Tunits	Equal variances assumed	.253	.622	-.436	17
	Equal variances not assumed			-.440	16.924

Table 3

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
					Lower
Tunits	Equal variances assumed	.668	-.811	1.861	-4.738
	Equal variances not assumed	.665	-.811	1.843	-4.701

Table 4

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the Difference
		Upper
Tunits	Equal variances assumed	3.116
	Equal variances not assumed	3.079

After running the T-test, the results show no significant difference at the 95%
confidence level between the mean score 8.30 and 9.11

t = -.-.436, sig = .668

Condition 2: Control group vs. Experimental 2:

Ho: C = E2
HA   ≠
t = -1.16   sig = .258

Table 5

Group Statistics

Group	N	Mean	Std. Deviation	Std. Error Mean
controlGroup	10	8.30	4.373	1.383
Tunits Experimental 2	14	10.07	3.125	.835

Table 6

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Tunits	Equal variances assumed	.931	.345	-1.160	22
	Equal variances not assumed			-1.097	15.349

Table 7

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
					Lower
Tunits	Equal variances assumed	.258	-1.771	1.526	-4.937
	Equal variances not assumed	.290	-1.771	1.615	-5.208

Table 8

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the Difference
		Upper
Tunits	Equal variances assumed	1.394
	Equal variances not assumed	1.665

After running the T-test, the results show no significant difference at the 95%

confidence level between the mean score 8.30 and 10.07.

t = -.-1.160, sig = .258

Condition 3: Experimental 1 vs. Experimental 2:

Ho: E
HA $\neq$
t = -1.16   sig = .258

Table 9

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Tunits	Experimental 1	9	9.11	3.655	1.218
	Experimental 2	14	10.07	3.125	.835

Table 10

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Tunits	Equal variances assumed	.136	.716	-.674	21
	Equal variances not assumed			-.650	15.215

Table 11

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
					Lower
Tunits	Equal variances assumed	.508	-.960	1.426	-3.925
	Equal variances not assumed	.525	-.960	1.477	-4.105

Table 12

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the Difference
		Upper
Tunits	Equal variances assumed	2.004
	Equal variances not assumed	2.184

After running the T-test, the results show no significant difference at the 95%

confidence level between the mean score 9.11 and 10.07

t = -.-674, sig = .508

<u>Examples</u>:

The second part of the analysis looked into the number of examples cited by students

in each group. The definition of hypotheses was set in these terms:

0 example= 1
1 example=2
2 examples= 3
3 examples=4
4 examples=5

Ho: No relationship between Groups and number of examples
HA: there is a relationship

Table 13

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Group * Examples	33	100.0%	0	0.0%	33	100.0%

Table 14

*Group * Example Crosstabulation*

			Examples			
			No examples used	1 example	2 examples	3 examples
Group	controlGroup	Count	3	4	2	1
		Expected Count	1.8	2.7	1.5	2.1
		% within Group	30.0%	40.0%	20.0%	10.0%
		% within Examples	50.0%	44.4%	40.0%	14.3%
		% of Total	9.1%	12.1%	6.1%	3.0%
	Experimental1	Count	2	2	3	2
		Expected Count	1.6	2.5	1.4	1.9
		% within Group	22.2%	22.2%	33.3%	22.2%
		% within Examples	33.3%	22.2%	60.0%	28.6%
		% of Total	6.1%	6.1%	9.1%	6.1%
	Experimental2	Count	1	3	0	4
		Expected Count	2.5	3.8	2.1	3.0
		% within Group	7.1%	21.4%	0.0%	28.6%
		% within Examples	16.7%	33.3%	0.0%	57.1%
		% of Total	3.0%	9.1%	0.0%	12.1%

Total	Count	6	9	5	7
	Expected Count	6.0	9.0	5.0	7.0
	% within Group	18.2%	27.3%	15.2%	21.2%
	% within Examples	100.0%	100.0%	100.0%	100.0%
	% of Total	18.2%	27.3%	15.2%	21.2%

Table 15

*Group * Examples Crosstabulation*

			Examples	Total
			4 or more examples	
Group	controlGroup	Count	0	10
		Expected Count	1.8	10.0
		% within Group	0.0%	100.0%
		% within Examples	0.0%	30.3%
		% of Total	0.0%	30.3%
	Experimental1	Count	0	9
		Expected Count	1.6	9.0
		% within Group	0.0%	100.0%
		% within Examples	0.0%	27.3%
		% of Total	0.0%	27.3%
	Experimental2	Count	6	14
		Expected Count	2.5	14.0
		% within Group	42.9%	100.0%
		% within Examples	100.0%	42.4%
		% of Total	18.2%	42.4%
Total		Count	6	33
		Expected Count	6.0	33.0
		% within Group	18.2%	100.0%
		% within Examples	100.0%	100.0%
		% of Total	18.2%	100.0%

Table 16

Chi-square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.978[a]	8	.043
Likelihood Ratio	19.932	8	.011
Linear-by-Linear Association	8.729	1	.003
N of Valid Cases	33		

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is 1.36.

After running a Chi-square test, the results indicate that there is a relationship between the number of examples and the various groups according to each treatment as explained here below.

$$X^2 = 15.978 \qquad\qquad sig = .043$$

At 95% confidence level,

    If   sig > .05, Ho
    If   sig ≤ .05, HA

The results not only show a significance of .043, but they also reveal that E2 was the only group who cited all 4 examples (6 students out of 14). This may have a direct incidence with the fact that this group benefited from visual images for each example cited.

The results, also indicate that participants in E1 cited between 2 and 3 examples, while the majority of the participants in the control group only cited 1 example, which accounts for 4 participants while 3 out of 10 participants in the same group cited 0 examples. The Bar chart below shows these results per group and per number of examples in each group.
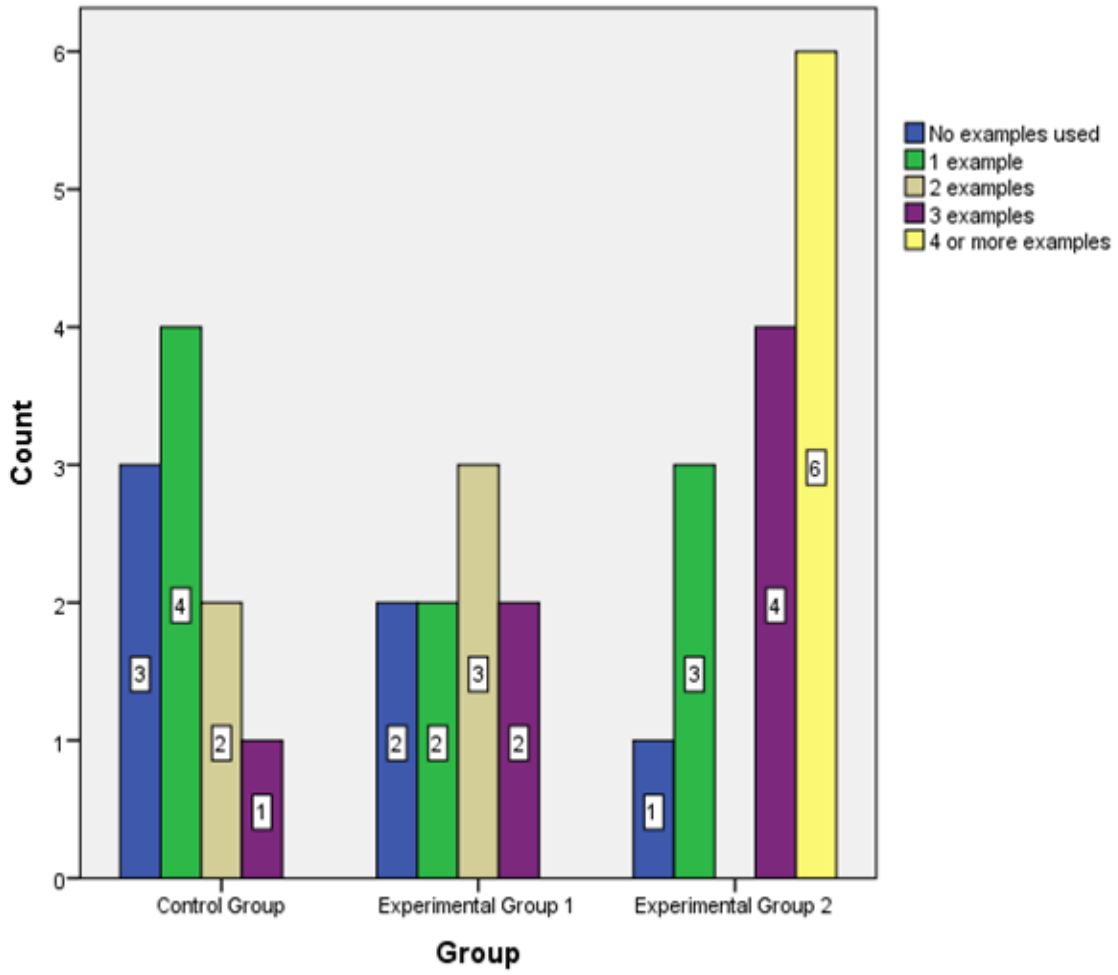
Chart 1. Bar Chart Comparing Number of Examples Cited by Group Category

Chapter V: Discussion

This section reviews the research question, study results, and probable reasons for the outcomes. The results are then applied to the pedagogical implication for teachers in a classroom context. Finally, the various limitations of this study are addressed and suggestions for future research are provided.

Summary of Results

The first part of the analysis of results related to whether or not introducing oral input using different means would make a significant difference in students' recall did not indicate that the use of sole oral input (Control Group), gestures and facial cues (Experimental 1) or text and images added to the oral content (Experimental 2) had any incidence on the amount of information students managed to recall. As indicated in the T-tests, at a 95% confidence level, results showed no significant differences between the mean scores in each group.

For instance, between the control group and experimental group 1, the results showed no significance with a mean score of 8.30 and 9.11 in table 1, (t = -.436, sig = .668) as shown in Tables 2. And 3.

The comparison between the control group and experimental 2 in Table 5 had a mean score of 8.30 and 10.07 (t = -.-1.160, sig = .258) (table 6, 7). Again, there is no significant difference to mention for this experiment, where the PowerPoint presentation with images and text did not seem to make a difference in the amount of information students retained and recalled in their writing assignment compared to their peers who only had voice recording with no visual input.

The data analysis also looked into a comparison of results between both experimental groups to discuss possible significant differences between these 2 modes, yet at this level, there were no significant differences in students recall to report either. Table 9 shows a mean score between the two groups of 9.11 for experimental group 1 and 10.07 for experimental group 2, (t = -.-674, sig = .508) in tables 10 and 11.

On the other hand, the second analysis showed a significant relationship between the number of examples cited and the type of oral input for each group. Indeed, there was a total of four examples mentioned in the presentation of people or companies who use or used social media to promote their image and their business. These examples are: Absolut Vodka, BMW, Dunkin Donuts, and Barak Obama, in this particular order. In Control Group 2, a directly related picture to the topic was showed in the PowerPoint presentation when each example was mentioned. This group seemed to be able to cite the highest number of examples; with 6 participants out of 14 citing all four of them. As a matter of fact, this was the only group where all four examples were recalled. With a significance of .041 (Table 16), it appears that adding images to support the oral presentation helped students retain and pay more attention to specific information they listened to in the classroom. However, in this instance, the text did not seem to have any significant relevance. Another interesting aspect was the fact that the example of Barak Obama in the presentation was the example students cited the most across all groups. The results also indicate the E1, the group who watched the video of the speaker cited more examples than the control group, yet did not reach the count of all four examples. These results show a relationship between the outcome and the mode of input, and indicate that visual support has an incidence on how well students retain information. Furthermore,

they indicate that images have the strongest impact on how well students manage to recall detailed information.

Pedagogical Implications

Second language teachers are always looking for more effective ways to instruct and help their students acquire strong language skills and advance in their second language acquisition. In a listening comprehension classroom, teachers often struggle between keeping students focused on "what they hear" and helping them gain more meaning from what they hear.

Rubin (1994) stresses the value of visual support in listening comprehension and cites several studies including her own in favor of using videos in language classrooms. This study compared three settings in a listening comprehension classroom to analyze the effect of visual support versus no visual support on students recall abilities. The comparison of visual support was made at two different levels, one comparing gestures and visual cues and the other images and text in a PowerPoint presentation. Making reference to Rubin's article, Hoven (1999) correlates listening comprehension to visual comprehension and argues that LC and VC are complementary and should both be incorporated in teaching listening and speaking in L2. With this in mind, this study did not report significant differences in terms of performance in the recall process among advanced language learners in either setting, though for educational purposes, diversifying modes of oral input and supporting it with different types of visuals does not hinder learners' comprehension and clearly exposes them to diversified ways to receive language. Nevertheless, this study strongly suggests that supporting oral input with pictures is highly recommended. In fact, the results show that students who were given

specific examples accompanied with pictures, managed to recall most of those examples. So, for educational purposes, if teachers want their students to pay specific attention to certain details, supporting the oral input with a visual is highly recommended.

Limitations

Though the results of this study are encouraging, some limitations are worth mentioning such as the sample size. Class sizes in College ESL at this Central Minnesota University is fairly small ranging from 10 to 20 students per class. Although class sizes is larger during fall semester, spring semester seems to attract less students, so hence the fairly small number of participants in this study. It would be interesting to replicate this study with a larger number of participants in each group for more significant results and a better comparison.

Also, there are some questions on the reliability of the outcome of the Chi-square Tests because of the violation of the assumption that 15 cells (100.0%) have expected count less than 5. The minimum expected count is 1.36 (table 16). However, it shows significance as indicated in Table 15 as the number of examples cited exceeded the number expected per groups.

Another limitation worth discussing is the use of a video rather than a live presenter in experimental group 1. Language specialists now consider body language as one the most crucial and essential part of authentic speech (Gullberg & McCafferty, 2008), the question is where does a video of a presenter stand in terms of authenticity in comparison with an individual being physically present in the room? Maybe it is worth considering running

similar tests using a live presentation in the classroom with a person using gestures and visual cues in the presence of students rather than through a videotaped presentation.

Also, in order to have a better understanding of how visual support in a listening comprehension classroom affects students' performances, not only would it be judicial to run similar studies with a larger sample of participants, but also at multiple levels of language proficiency. This would help identify the role of visual cues and technology among beginners versus advanced language learners. Gestures and facial cues are significantly important in helping language learners infer meaning from speech, and most importantly, they are crucial for lower level learners who rely on those cues to attain better comprehension (Sueyoshi & Hardison, 2005). This study was conducted among advanced language learners, it would be interesting to conduct similar research among groups of students who are at a low or intermediate levels of language proficiency.

Conclusion

This study sought to find how visual cues and technology play a role in listening comprehension among English second language learners in comparison with delivering instruction for listening comprehension purposes using oral input alone. Though there are some limitations that were clearly identified, this study shed some light on the correlation between the use of images to support oral input when attention to details is needed. In fact, this study showed that when students receive visual support (images) in a listening comprehension task, their chances of retaining specific details are greater, even though from a general aspect of recall of information, there were no significant differences. The attention was given to details rather than mass information.

It is quite subsequent that researchers have argued that visual cues play a crucial role in helping listeners grasp more meaning and attain a better interpretation of what they hear. Visual comprehension has become inherent to listening comprehension with the development of technology and visual media (Hoven, 1999). Listening comprehension does not occur via oral input alone, but supported by visuals, students seem to retain more information and pay attention to details they would have missed without the visual support they can receive from the use of technology in its multiple forms in the language classroom.

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Appendix A: Informed Consent Letter

Title: The effect of Gesture and Body Language in Listening Comprehension

You are invited to participate in a research study to investigate listening comprehension in second language acquisition. You were selected as a possible participant because you are a member of the ESL learners' community within this university, and you are enrolled in a listening and speaking course.

This research project is being conducted by:
Soraya Folley, to satisfy the requirements of a Master's Degree in Teaching English as a Second Language at St. Cloud State University.

Background Information and Purpose
The purpose of this study is to learn more about listening comprehension among second language learners. Technology has influenced the traditional way of teaching listening comprehension. This study will investigate the effect of technology in the language classroom and how it can be used in a listening comprehension activity.

Procedures
If you decide to participate, you will be asked to complete a listening comprehension test after listening to a lecture twice. This will reflect your listening and comprehension skills in your second language.

Risks
There will be minimal risks involved for you in this study. Although your name will be kept confidential, there is always a slight possibility for your name or personal information to be revealed. However, the results will not affect your grade by any mean, nor will they affect your rapport with your teacher or the person conducting this research project.

Benefits
This study will allow us to learn more about listening comprehension, in which case, it will give teachers more insight on how to help more efficiently language learners. The more tools teachers may use to benefit language learners, the better they can serve them.

Confidentiality
The confidentiality of the information gathered during your participation in this study will be maintained. Your personal identity will remain confidential. You will not be identified by your name in any published material. You will be given a code number and referred to by that code only. All data will be kept confidential, until the completion of this project. Afterwards, all data will be destroyed and the only way to refer to it will be the final version of this project, the Thesis.

Research Results
Upon completion, my thesis will be placed on file at St. Cloud State University's Learning Resources Center. At your request, I will be happy to provide a summary of the research results when the study is completed.

Voluntary Participation/Withdrawal
Your participation in this study is voluntary. You may decide not to participate or to withdraw your consent to participate in this study at any time, for any reason, without penalty. Your decision whether or not to participate will not affect your current or future relations with St. Cloud State University, or the researcher.
The study investigator may stop your participation at any time without your consent for the following reasons: if you fail to follow directions for participating in the study, or for reasons deemed appropriate by the research to maintain the integrity of the study.

I have read all of the information on this consent form and received satisfactory answers to my questions. I will give my consent to participate in this study.

Subject Signature_____

Date_____

Appendix B: Text Used as Oral Presentation

"Understanding the Role of Social Media in Marketing
By Laura Lake, About.com Guide
        What is social media and what role does it play in my marketing? This is probably a question I wouldn't have received two years ago, but yet today it's the most common question that enters my inbox.
        First off, let's talk about what social media is. Social media represents low-cost tools that are used to combine technology and social interaction with the use of words. These tools are typically internet or mobile based. A few that you have probably heard of include Twitter, Facebook, MySpace and YouTube.
        Social media gives marketers a voice and a way to communicate with peers, customers and potential consumers. It personalizes the "brand" and helps you to spread your message in a relaxed and conversational way.
        The downfall to social media, if you could call it that is that it must be a part of your everyday life in order to keep the momentum and attention you need for it to be successful. If you think that social media is only for the small business owners that are trying out an experiment, I have to correct you. Here are just a few companies that have become involved in social media:
        Absolut Vodka - Online Video on YouTube and Using Facebook to house their Top Bartender fan page.
        BMW - Utilizing Facebook to promote their 1-Series Road Trip and they have created a Rampenfest Page for fans.
        Dunkin Donuts - That's right they've found value in social media and have set up a microblogging Twitter account.
        Barack Obama - In my examples, I can't leave out future President Barack Obama. He has been seen as a leader in the use of Twitter during the Presidential Election. He has over 170,000 followers and is following over 165,000. Personally I remember the "twitter buzz" during the Presidential Debates as well as the election.
        As you can see we have adult beverage companies, exotic automobile manufacturers, pastry shops and our future President using social media tool, it's not too hard to figure out that there is something to it.
        What role should it play in your marketing? As most of you know my view of marketing is it's a tool we use to inform consumers about our products, who we are and what we offer. Social media does that. Here is how:
        We can use social media to provide an identity to who we are and the products or services that we offer.
        We can create relationships using social media with people who might not otherwise know about our products or service or what our companies represent.
        Social media makes us "real" to consumers. If you want people to follow you don't just talk about the latest product news, but share your personality with them.
        We can use social media to associate ourselves with our peers that may be serving the same target market.

We can use social media to communicate and provide the interaction that consumers look for.

As you can see social media carries with it a lot of value, but how do you do it right? You cannot just depend on social media, you must integrate it with other vehicles of marketing. While social media will create awareness, I'm not convinced that in the beginning it will sell a million dollars worth of product. That's not to say that one day once you've built up your social media "stardom" that it won't, but it probably won't happen tomorrow.

Be yourself, reflect personality. There are no written "right" or "wrong" rules when it comes to social media, only you can determine what will work for you.

Be consistent, if you do not plan on being consistent don't do it at all - it's a waste of everyone's time.

Success stories are abundant when it comes using social media from headhunters that find job applicants to new businesses that want to introduce a new product as well as already established Fortune 500 companies that want to strengthen their brand. The role of social media in your marketing is to use it as a communication tool that makes you accessible to those interested in your product and makes you visible to those that don't know your product. Use it as a tool that creates a personality behind your brand and creates relationships that you otherwise may never gain. This creates not only repeat-buyers, but customer loyalty. Fact is social media is so diversified that it can be used in whatever way best suits the interest and the needs of your business".

Appendix C: PowerPoint Used in Experimental 2

Slide 1

Understanding the Role of Social
Media in Marketing

By Laura Lake
About.com Guide
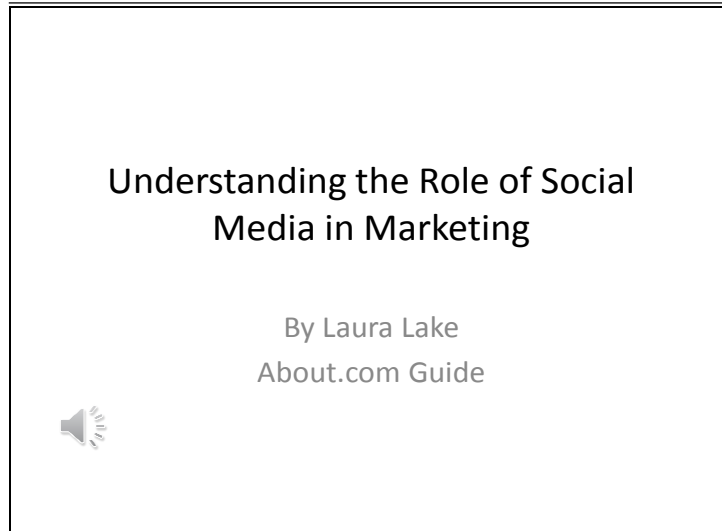
Slide 2
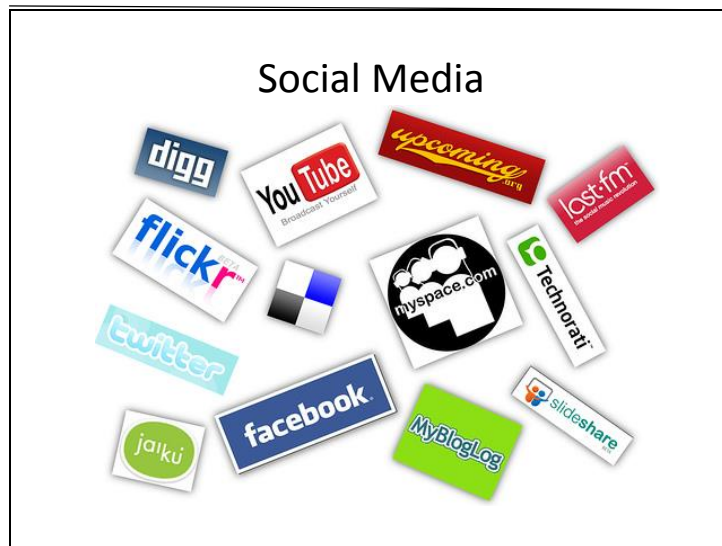
Social Media

Slide 3

Slide 4

Slide 5

Slide 6

Slide 7

> ## How Social Media Works for Marketing
>
> - Establishes company's identity
> - Creates relationships with potential customers
> - Shares the company's personality with customers
> - Allows companies to associate with peers
> - Allows companies to interact with consumers

Slide 8

> ## How to Do Social Media Right
>
> - Integrate social media with other marketing methods
> - Be yourself, reflect personality
> - Be consistent

Appendix D: Directions

Directions for participants:

Recall

You will listen twice to a presentation about "Understanding the Role of Social Media in Marketing.

Pay attention and do not take notes while listening.

You will have 25 minutes to write a recall. This is not a summary. This means that you need to write as much information as you remember from the presentation, and as many details as possible.

When you finish, please wait for everyone else to finish as well. If you remember more details after you thought you were done, and wish to add that information, feel free to do so until the time is up.

I will not collect your papers until 25 minutes from now.

You may start now.