Sino-US English Teaching, August 2022, Vol. 19, No. 8, 263-269 doi:10.17265/1539-8072/2022.08.001



# The Efficacy of Multimodal Input on ESL Learners' Listening and Speaking Abilities

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Language input in foreign language classrooms is no longer restricted to one particular mode of transmission, but it can be achieved by use of different modes. Multimodality or the combination of various modes has been applied to stimulate foreign language learning. The present paper aims to verify the effectiveness of multimodal input in language learning. It demonstrates the experiment conducted in two freshman classes in a university. The two classes used the same textbook supported by audio CD containing the recorded material. The experiment class, however, additionally has some visuals in listening classes to strengthen the linguistic input. The research lasted for one semester and findings from the study show that multimodal input has significantly improved the listening and speaking abilities of the students and also has positive impacts on the learners' attitudes towards language study.

Keywords: multimodal input, English as a second language (ESL) learner, listening and speaking abilities

#### Introduction

English teaching in China usually focuses more on vocabulary and grammar while listening and speaking have long been ignored. As a result, most Chinese students have good mastery of grammar and vocabulary but are not proficient at listening and speaking. Besides, some textbooks for listening courses are not reasonably compiled, unable to arouse the interest of the students effectively, not to mention to improve their listening and speaking abilities.

In recent years, audio labs (where students have their listening classes) of most universities in China have been equipped with computers, earphones, microphones, and so on. In consequence, students can not only listen to the recorded materials but also watch visuals and have oral activities. These facilities offer adequate technological support for multimodal input in listening classes. Therefore, multimodal integration teaching is made possible as the result of the practical convenience of the audio labs.

## **Literature Review**

The term "multiliteracy" was put forward by the New London Group in 1996. They advocated that different modes should be applied into teaching and learning. Various studies related to multiliteracy have been conducted in different areas. Some exploration focuses on the analysis/construction of the multimodal texts

Acknowledgement: My sincere thanks should be expressed to Martha Michieka, associate professor at East Tennessee State University, Johnson City, TN, USA, who has provided valuable advice for me in writing this paper.

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(Baldry, 2008; Hennecke, 2010; Bearne, 2009; Gardner & Levy, 2010; Chen, 2010). Edwards-Groves (2011) studied the multimodal writing process.

There are a great number of studies concerning the application of multimodals in language teaching and learning (Kress, Jewitt, Ogborn, & Tsatsarelis, 2001). Margaret Early and Sondra Marshall (2008) reported a study of high school students with limited English proficiency in which a multimodal approach is applied to language teaching. Their study shows that the multimodal approach plays a vital role in improving academic success of the English language learners. Hassett and Curwood (2009) demonstrated the theories related to multimodal education and discuss the practices that are applicable to multimodal education. Maureen Walsh (2010) collected data from nine case studies which prove that printed literacy could be combined with digital media in many areas of the curriculum. She demonstrates the integration of various modes, particularly digital communication, applied in the aspects of listening and talking, reading, writing, etc. The study points out that the new multimodal literacy pedagogy does have positive effects on learning and teaching. According to Carol Westby (2010), the development of society requires that students should have the ability to communicate not only in printed words but also in various modes of literacy. The paper also presents the nature of multiliteracy, the framework for teaching multiliteracy and puts forward the practical methods to help students with language learning problems improve their understanding. Leila Kajee (2011)claimed that English-as-an-additional-language (EAL) students are able to make use of multimodal representations to improve their creativity in literacy. Maxi Kupetz (2011) specified the function of multimodal approach in helping students to form meanings by various materials. The paper also advocates that teachers of content and language integrated learning (CLIL) should provide more chances for students to employ different resources. Carey Jewitt (2008) explored that in the English classroom in UK, their teaching and learning are not only restricted to print letters, photographs, sound, music, and animation in DVDs and CD-ROMS are part of their various forms of communication.

## **The Present Study**

One university freshman class was chosen as the experiment class and another one of the same proficiency level as the control class. The students in the two classes were taught by the same lecturer. These two classes used the same course books which were backed up by two audio CDs loaded with the recorded material. The experiment class, however, had access to other visuals supporting their listening classes and strengthening the linguistic input.

The research lasted for one semester with listening tests and oral tests being conducted during that period to find out whether multimodal input has any effect. In addition, relevant questionnaires were handed out and interviews were performed to collect data.

# **Participants**

Two classes, altogether 79 students, of college freshmen from a key university in Beijing (China) participated in the study. For them, English, as one of their important subject, is the compulsory course in their first two years at university. They had studied English for about nine to 12 years and had reached intermediate-level of English proficiency. Before they were enrolled in the university, they had passed the National Entrance Examination after finishing high school and had high scores in the examination, which is similar to SAT in the United States.

At the beginning of their first semester (fall term) in college, all of them must take an English proficiency exam. According to their scores in the exam, they would be grouped into different levels in general: A, B, and C, A being the highest level and C the lowest.

After the proficiency exam, six classes of Level B attended a listening test (1st listening test) and at last two classes without much difference in scores were chosen to participate in the experimental study—one control class (40 students) and the other one experiment class (39 students). In the next week, the classes had an oral test, which was designed to asset their communication skills in English (1st oral test). In current study, it is clear that all the participants have ability to understand listening materials and all of them are able to communicate in English although there was variability in their proficiency.

## **Materials and Apparatus**

In the English listening and speaking class, students of the control class and experiment class used the same textbook—*Listening and Speaking Course (Book 1)* published by Shanghai Foreign Language Education Press in 2005. The book falls into 15 units, each unit of a particular theme, mainly about life, society, education, vacation, etc. In other words, these are topics that interest university students regardless of their different majors.

Each unit is divided into several sections including short conversations, long conversations, short passages, and so on. For each section, there are exercises such as multiple choices, blank-filling, and short answer questions. Each unit also has a speaking activity section with a long list of functional sentences related to the specific theme of the unit. The textbook is supported by a CD, loaded with the listening materials for the textbook.

Each class had two hours for English listening and speaking course every week in the audio lab. Every student was provided with an earphone and computer screen which were mostly controlled by the lecturer. There was a control desk in the front of the audio lab, operated by the lecturer, whose main component was a computer, a control screen and a computer screen. Listening materials, videos, PPT, and pictures were shown on the computer and transferred to the screen in front of each student. Generally speaking, it was the lecturer who decided the content of the listening class unless he pressed the button "self-study" on the control screen. In this way, the audio labs provided sufficient facilities for the students to be engaged in speaking and listening.

# **Design and Procedure**

In the listening hours of the control class, normally the lecturer first presented instructions, particularly listening skills before CD of the textbook was played section by section. In other words, what the lecturer taught was mainly restricted to the materials of the book, without reference to visual materials or other supplementary materials. Apart from the speaking activity covered by the book, there was no more speaking practice.

While in the listening hours of the experiment class, the lecturer did not only do what she did in the control class and played CD of the text book, he also supplemented with more materials involving visuals, English music, PPT, and so on, which could arouse the interest of the students and create active atmosphere in class. For instance, in the unit of the theme "Going on Vacation", the students did not only listen to the recorded material from CD of the textbook, but they also watched videos of *The One at the Beach* (Episode 25, Season 3, Friends) and *The One With Rachel's Dream* (Episode 19, Season 9, Friends). After enjoying the videos, students were divided into groups to retell the story and were asked to practice their oral English with

topics related to the visuals. Next, they were given some time to share their vacation experiences. In the unit of the theme "Animals", the lecturer played part of the films *Garfield: The Movie* and *Arctic Tale (Polar Bear)*. Then the students participated in speaking activities centering on the videos they watched. In addition, they were glad to tell the pets they have raised. The lecturer also recommended the students finish the movies after class and assigned the students to prepare for some oral tasks about the movies.

#### **Data Collection**

**Questionnaires.** Questionnaires are designed to investigate students' attitude toward their listening classes. They were made in the form of Five Point Likert Scale. Altogether, there are 10 statements, each one followed by five choices. Here is an example.

The listening class is interesting.

- A. Strongly agree B. Agree C. Neither agree nor disagree
- D. Disagree E. Strongly disagree

If A is chosen, one point is scored. If E is chosen, five points are scored. B means two points, C three points, and D four points. The higher the score is, the more unsatisfied the students are with the class. Such investigation was conducted twice. The first one was carried out at the beginning of that fall semester and the second one at the end of that semester of the same questionnaire.

Table 1
The Results of the 1st and 2nd Questionnaires

	Mean score of control class	Mean score of experiment class
First time questionnaire	26.34	27.53
Second time questionnaire	18.26	29.15

# Interview topics:

- 1. What is the most interesting part in your listening class?
- 2. What is most helpful to improve your English listening comprehension in listening class?
- 3. What is most helpful to practice your oral English in the listening class?

The interview was conducted at the end of that fall semester in the experiment class. This is to make sure whether the supplementary materials in the listening class really help the students and which of them are more popular.

Table 2

Results of Interview

	Textbook recorded materials	English movies/visuals	English music/news	PPT	Others
What is the most interesting part in your listening class?	21%	43%	13%	15%	8%
What is most helpful to improve your English listening comprehension in listening class?	31%	46%	15%	6%	2%
What is most helpful to practice your oral in listening class?	30%	41%	12%	10%	7%

**Tests.** After the proficiency exam, the control class and experiment class also attended the first listening test, the total score of which was 20. There was not much difference between the two classes in their average scores. A week later, they had the first oral tests with the full score of 20. Each student had two topics for his conversation and completed in five minutes.

At the end of the fall semester, the experiment class and control class had the second listening test and oral test with the full score of 20 respectively. The topics for the oral test were chosen from the same sourcebook as the first oral test.

Table 3

Panel A: Listening Test

	Control class $(N = 40)$		Experiment of	Experiment class $(N = 39)$			
	Mean	SD	Mean	SD	t-stat	<i>p</i> -value (two-tail)	
First test	10.975	3.423	10.744	4.086	-0.272	0.786	
Second test	12.650	2.259	14.282	2.215	3.242	0.002	
Improvement	1.675 (15.3%)	2.059	3.538 (32.9%)	2.959	3.242	0.002	
t-stat	5.146		7.468				
<i>p</i> -value (one tail)	< 0.001		< 0.001				

Table 4

Panel B: Oral Test

	Control class $(N = 40)$		Experiment class $(N = 39)$		Difference	
	Mean	SD	Mean	SD	t-stat	<i>p</i> -value (two-tail)
First test	11	2.160	11.487	2.360	0.956	0.342
Second test	12.025	1.846	13.231	2.071	2.729	0.008
Improvement	1.025 (9.32%)	1.423	1.744 (15.2%)	2.074	1.791	0.078
t-stat	4.556		5.250			
<i>p</i> -value (one tail)	< 0.001		< 0.001			

## **Analysis of Research Results**

Table 1 reveals that there is no big gap between the two classes for the first questionnaire investigation, with the mean score difference of 1.19. This is because the investigation was conducted at the beginning of that fall semester. At that time, the teacher lectured the same in the experiment and control classes, and did not supplement any visuals and other materials in the experiment class. In contrast, the table shows that after about four months of study, the gap between the experiment class and control class has extended to 10.89 (29.15 - 18.26 = 10.89).

The interview displays that students of the experiment class are attracted to the visuals in the listening class and they would like to practice their oral English since they want to say something about what they watch in listening class.

Table 3 demonstrates the results of the first and second listening tests of the experiment class and control class. The statistics show there is no obvious difference (P = 0.786 > 0.05) in the first listening test between the two classes, while the scores of the second listening test do show the big difference between them (P = 0.002 < 0.05).

Table 4 indicates the results of the first and second oral tests of the two classes. There is no big difference between them in the first oral test (P = 0.342 > 0.05). However, the scores of their second test really differ a lot, which is manifested in the average scores respectively (P = 0.008 < 0.05). In addition, both Table 3 and Table 4

show the various degrees of the improvement of the two classes in listening comprehension of English and oral English practice. The degree of improvement of the experiment class is higher than that of the control class both in listening and speaking proficiency.

#### Conclusion

Table 3 and Table 4 demonstrate that the experiment class has made greater progress in listening and speaking skills. The main cause is that students in the experiment class are exposed to different modes of input instead of only being restricted to audio materials. Furthermore, the investigation has proved that various modes of practices involved in their listening and speaking activities play a significantly positive role in arousing the interest of the students. Meanwhile, the interview results demonstrate that what the students in experiment class are most interested in is the supplementary visuals in listening classes. Visuals create vivid atmosphere for the class which is essential to reduce anxiety and pressure of the students in listening class. Apart from that, visuals provide proper opportunities for students to practice their oral English, because they like the movies and want to express their opinions related to the movie characters and plot. Meanwhile, they desire to share and argue their ideas with partners of their group in class. Different modes of input are not only loaded with interesting information, but also transform the attitude of the students, and therefore, improve the efficacy of the developing abilities in listening and speaking. In consequence, the experiment class improves more than the control class in listening skills and oral performance.

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