A Research on Multimodal Self-Directed English Listening Teaching Model

BAO Xiaoli[a],*

[a]Foreign Language College, Inner Mongolian University for Nationalities, Tongliao, China.
*Corresponding author.

Received 6 March 2016; accepted 15 May 2016
Published online 26 June 2016

Abstract
This article takes listening teaching of a university in Inner Mongolian as an example, compares traditional listening teaching mode, which only uses audio resources with multimodal self-directed teaching mode, examines learners’ acceptance to the new teaching mode and its teaching effect through questionnaires and tests, and discusses what effects multimodal self-directed listening teaching has on learners’ listening level and multi-literacy ability. It has been found that this new teaching mode is popular with most of the students, can help effectively improve learners self-directed learning and effectively enhance listeners’ listening level and multi-literacy ability.

Key words: English listening comprehension; Multimodal self-directed learning; Multi-literacy ability

INTRODUCTION
Listening is a most important skill in college English teaching and the application of the English language. However, the weakness of the listening has restricted the comprehensive application ability of the English language. For a long time in college English listening teaching, even professional English listening teaching has been confined to teachers’ using pure audio resources to teach listening and learners understanding according to what they hear. This teaching model is monotonous in form and listeners accept the teaching passively. Thus, teaching effect is not so satisfactory. In the recent years, listening teaching reform in university has integrated video into listening teaching. Video sources have the characteristics of animation and colorfulness. Learners are inclined to apply it to self-directed learning. What effects do video resources have on listening? How to take full advantage of these resources to help listeners solve listening difficulty? These questions need to be answered through empirical study.

The study of learner autonomy originated from 1880s, while the research of the application of Multimodal Discourse Analysis of foreign language teaching sprung up in recent years. The influence of input modality to language learning has caught great attention in recent years. The hotspot focuses on the influences of different input modality to second language understanding. However, the empirical study on listening based on the combination of multimodality and self-directed learning is rare. Therefore, this article takes listening teaching of grade 2009 in a university as an example, compares the different teaching effects between listening teaching by only using audio resources and listening teaching by using multimodal method, examines what effects multimodal self-directed listening teaching mode has on learners’ listening level and explores the learning mode that uses modality, especially video to improve learners’ listening level.

1. THEORETICAL FOUNDATION
Discourse analysis proposed by Harris (1952) analyzed the internal law of discourse activities and its relation to cognitive mode and ideology. Multimodal discourse analysis breaks though the barrier of written word and extends the study of discourse analysis to other forms of...
meaning, for examples, picture, voice, color, cartoon, and becomes a hotspot of research at home and abroad.

1.1 Multimodality and Multimedia
Halliday (1985) believed in specific social environment, people always use all kinds of symbolic resources to complete the construction of meaning and these various kinds of symbolic resources constitute multimodality (Kress & van Leeuwen, 2001, p.80). LeVine and Scollon thought multimodality is the various modes people adopt to communicate, for examples, words, taste, color, image etc. (2004, pp.3-5). Hu (2007), Gu (2007), Zhang (2009) and Zhu (2008) believe using two or more sense organ to interact is a kind of multimodality.

In multimodal discourse analysis, media and modality are the two keywords. Media is the medium that realizes information exchange among people. In brief, media are the information carriers and media concerning two or more media are called multimedia (Gu, 2007). Therefore, multimedia and multimodality are closely related. On one hand, the development of multimedia technology prompts the emergency of new discourse forms; on the other hand, multimodal discourse analysis turns to multimedia tools, for examples, the transcription and analysis of sound, the interception and decomposition of dynamic image and the building of corpora etc.. Therefore multimodal discourse analysis will promote the combination of multimodality and multimedia (Xin, 2008). Therefore multimodal self-directed learning can’t do without support and application of multimedia technology.

1.2 Multimodality and Multi-Literacy
“Multi-literacy” is a term that firstly proposed by the New London Group in 1996. The term is generated from “literacy”, which means “the ability to read and write”. As mentioned before, with the society booming globalized, various kinds of contexts and texts have come into being, which no longer contain language alone, but with other multimedia technology as visual images, sounds, video and etc.... That is to say, “multi-literacy” demands not only the ability to read and write in language, but also the ability to read all the multimodalities presented in a discourse, to integrate them into a coherent meaning, and also the ability to express one’s intention with them. They believe people get access to information conveyed by many media, for example, press work, images, video tape and have to communicate with people from groups with different culture background, therefore, it is highly demanded that English teaching should break through monotonous and standard linguistic ability, and cultivate learners’ multi-literacy. Gentle, Knight and Corrigan believe that multi-literacy is composed of 5 elements: a) language elements, for example, words, metaphor, structure and modality; b) visual elements, for example, color, perspective, vector, foreground and background etc; c) auditory elements, for example, voice, music, acoustics; d) posture elements, for example, behavior, feeling, body controlling, emotion, action etc.. e) space elements, for example, ecological space, geometric space, architectural space, etc. (Zhu, 2008).

The main method to foster multi-literacy is introducing multimodal teaching and connecting multi-literacy with conversion of modality and conversion of media. Learners’ visual sense, auditory sense, tactile sense, smell, taste etc interact with each other, thus reaching the aim of multi-literacy, that is helping learners to adapt to diversified lifestyle better in the future (Hu, 2007; Zhu, 2008; Wei, 2009).

Helgesen (2003), Rost (2002), Richare and Schmidt (2002) defined listening as a positive construction of meanings. Listeners not only decoded what they heard, but also positively obtained information from what they saw and heard and connected them with what they had learned (Rubin, 1995). Therefore listening is the first link (step) that applies multimodal teaching, is also the sally port that achieves the goal of multi-literacy. Some scholar put forth many valuable advice on how to cultivate multi-literacy. Kress et al. (2001, p.42) recommended introducing behavioral, visual and linguistic sign resources, and promoted the interaction of these sign resources, arriving complete construction of meaning and literacy. Healy put forward to bring these steps into classroom teaching: a) situated practice; b) overt instruction; c) critical framing d) transformed practice (quoted from Hu, 2007). Thus, teachers lead learners to experience, analyze, apply multimodal text, bring learners into the body of the classroom practice and promote comprehensive ability of multiple subjects.

However, under the traditional teaching mode, information learners obtained from auditory sense belongs to single modality learning, in the process there is no modality change from auditory sense to brain understanding. Thus, if video is introduced during the listening stage, oral background information is added in pre-listening stage and oral retelling and classroom discussion are added in post-listening stage, modality conversion will naturally occur, that is, from input auditory modality to motion modality and written modality, which relate to optic nerve, vocal organ and body movements (Thibault, 2004). The conversion of modality can strengthen the level of internalization of what learners have learned and convert more input into intake.

1.3 Self-Directed Learning of Foreign Language
As a scientific education theory, self-directed learning was originated in 1960s. Self-directed learning is a model of instruction whereby learning content is predetermined by the instructor and students learn at their own pace to master this content. Characteristics of self-directed learning include personal autonomy, self-directed learning, learner control and auto-didaxy. It has
been spread vigorously by efforts of Holec (1981), Little (1991), Dickinson (1995), Benson (2005) in linguistics teaching field and even is considered to be the ultimate goal of foreign language education. Self-directed learning is a multi-dimensional complicated concept. It is both an ability and an attitude, including learners’ self-choice and control about the aspects of learning as well as the self-planning, management, monitoring and regulation of the whole learning process (Zhu, 2011). Su and Zhuang (2008, pp.85-87) believe the concept of self-directed learning not only includes attitude and ability, but also includes environment, that is, giving all kinds of opportunities and situations to use knowledge, exercising oneself and improving one’s learning ability.

It can be seen improving learners’ self-directed ability has become a goal that foreign language teachers keep on exploring, practicing and endeavoring. However, how to achieve the goal? This study brings multimodal self-directed learning mode into listening course for English majors. The author designs a 20-minute period of classroom activities, during which learners discuss and decide what material they will learn, design course content and exercise form, and combine watching video materials, listening audio materials with subsequent oral discussion. The author extends listening course outside classroom and again pulls back listening course into classroom, realizing the interconnection of out-classroom and in-classroom activities, mobilizing all the senses-auditory sense, visual sense, tactile sensation, etc. developing learners’ initiative, creativeness and team-work spirit, eliminating loneliness and anxiety in learning, enhancing the participation consciousness and enthusiasm. As a result, learners’ listening performance is improved.

### 2. RESEARCH DESIGN

#### 2.1 Research Questions

This research will discuss the following three questions:

- a) Is multimodal self-directed learning universally welcomed by learners? b) Can multi-modal self-directed learning improves learners’ self-directed learning ability?
- c) Can multimodal self-directed learning really improves learners’ listening level and multi-literacy?

#### 2.2 Participants

Participants are English majors of grade 2009 in a university. Fifty students are in the experimental group, in which multimodal self-directed learning teaching mode is used while the other fifty students are in the controlled group to which traditional teaching mode are applied. Before experiment the author conducted a test on two groups of students, finding they are almost on the same level. The experiment lasted from March 2010 to March 2011.

#### 2.3 Research Instruments

One of the instruments is questionnaire, including pre-test and post-test questionnaire, pre-test questionnaire concerning using video to study while post-test questionnaire relating to intermediate listening survey questionnaire for English majors. Pre-test questionnaire aims to know the situation of students using multimodal self-directed learning. post-test questionnaire aims to know students’ feed back of multimodal self-directed learning, providing datum to quantity analysis. The questionnaire of listening learning by using video is mainly composed of the following aspects: attitude toward listening learning by using video, motivation of listening learning by video, spending of time on listening learning by using video, learning methods, effects of using video to learn listening, the feeling of video assisted listening learning, and suggestion to video assisted listening learning. Intermediate listening questionnaire survey for English majors consists of the following aspects: Advantages and disadvantages of using video to learn, advantage and disadvantage of independent class project designed by students themselves, difficulty of self-directed design of video learning, materials types of students’ preference, the opinions of using video to learn and the opinion on introducing video to the classroom interaction and discussion.

Another instrument is the listening level pre-test and post-test. The pre-test paper is designed by the author and post-test paper is the listening test paper for English majors 4. All the datum of experiment are analyzed by the SPSS.

#### 2.4 Research Procedures

Operation methods of multimodal self-directed listening teaching mode. Experiment group study in multimedia classroom. Students of experiment group use video to design what they will learn and exercise, and for each period two groups present students what they will learn and how to interact. According to Underwood’s (listening teaching expert) listening teaching stages (quoted from Helgesen & Brown, 2008, p.11) —pre-listening, while-listening and post-listening stages, the author designs listening teaching stages based on multimodality.

#### 2.4.1 Pre-Listening Stage

The class is divided into several groups. The teacher sequences the groups. Two groups take part in the demonstration each time and they respectively choose and design the subjects freely by themselves. The subjects may include politics, economy, culture, society and interesting news or things, etc.. Independent innovational design includes labor division of members in the group and components of project—dictation, retelling, translation, summing up the general idea, discussion of the relevant topics, etc.. Methods of demonstration include the time used to play video, the times to play
video, execution sequence etc. Video resources are chosen by group members, who can choose what they are interested in according to the topics. Apart from that, in order to arouse the enthusiasm of the students and actively studying atmosphere, some groups prepare small gifts as a reward. If necessary, small games are added, for example, word-guessing game, listening to the lyrics to recognize words. The above measures makes the class become a typical class that is based on multimodality. This teaching model can help students understand, remember and digest what they have learned easily, and it also has the effects of activating the class atmosphere and motivating students’ initiative. Before class teacher also guides students effectively, help them choose learning materials and put forward some constructive suggestions in order to optimize the multimodal classroom effects.

2.4.2 While-listening Stage
In the classroom, two groups that have already made preparation go to the stage to demonstrate what they will learn. They direct the whole class to listen learning according to the English video material they have already chosen. Each group plays video according to the design and tasks of the group members. In this process, the students’ hearing, visual sense, tactile sense can be aroused in order to record relevant information. After the first playing of the video, usually there will be some questions for learners to answer. With the increase of playing times, there will be more exercises, for examples, blank filling, retelling, video translating etc. Some groups may choose classical sections of the video to listen intensively.

2.4.3 Post-listening Stage
At the end of the video playing, there will be extended discussions relevant to the content of video in order to process the input information timely, then this input information is transferred to information output, deepening impression in time and then do thinking-extended exercises. This process makes timely input information internalize the knowledge of learners’ own and bring knowledge into learners knowledge system by the interaction and exchange of different kinds of senses.

After finishing project demonstration, other students grade the two groups as judges and give their suggestions. Teachers will give comments and correction on the demonstration as a participant and give some advice to later demonstration. The multimodal self-directed listening teaching mode changes previous situation that teachers provide listening materials and learners learn them passively, and in a way this teaching mode overcomes the shortcomings of traditional listening class, in which teaching form is single and simple, students lack of initiative, are easy to fall asleep, keep drifting away and fail to digest what they have learned. Further, this teaching mode can fully exert learners’ initiative, creativeness and imagination, team spirit and improve students’ participation in class activities.

3. RESULTS AND DISCUSSIONS

3.1 Pre-test
Before carrying on multimodal self-directed teaching mode, the author conducted a questionnaire survey on 100 participants. The effective response samples are 80 copies. Learners tend to learn from video resources because learning from them is interesting and practical (82% of the learners prefer video self-directed learning and 18% of the learners like audio resources). But this new teaching mode has many problems in self-directed learning practice. First, the time using video to learn is insufficient. The average learning time is within half an hour every day, accounting for 74%. Self-directed learning time more than one hour account for 26%. Second, learning method by using video also has its problems. The picture and action in the video will distract students from learning. Only 24% of students can take note and write down the important expressions while watching video. The above problems lead to the fact that subjectively learners are willing to practice listening by using video, but they believe video-based listening effect is almost the same as audio-based listening effect. 50.5% of the students think that using video to improve listening performance is very obvious, but 49.5% of students believe that using audio to improve listening effect is better. The amount of students who are favor of audio learning is almost the same as the amount of students who are in favor of video.

Pre-test questionnaire which aims to find out the real listening situation shows that although learners subjectively tend to use video resources which are rich in form and are diversified in contents, still its effects are almost the same as audio listening learning. However, according to Gu’s (2007) multimodal foreign language learning mode, the modality shift stimulates the brain and enhances memory and understanding. Compared with audio resources, video resources should have more advantages than audio resources, but the results of the questionnaire indicate that these advantages are still not exploited to the full. Therefore we need to further discuss how to apply video resources to listen learning, make video resources become an important part of multimodal self-directed learning, play a more important role, produce better effects and guide students to use video resources efficiently and purposefully. Our one-year listening experiment of class design aims to exert video’s superiority and make it maximize.

3.2 Post-test
3.2.1 Is Multimodal Self-Directed Listening Teaching Popular With Students Universally?
After one-year experiment, the author conducted another questionnaire to the learners of experiment group. The results show that the number of students who choose
video resources to learn is greatly increasing. Among them 95% of the learners sincerely welcome the practice of introducing video into listening classroom and also think that they benefit a lot from video listening learning.

3.2.2 Can Multimodal Self-Directed Listening Teaching Mode Improve Learners’ Self-Directed Learning Ability?
After learners better understand and proficiently use video resources (including self-directed class design, taking notes, discussion, etc.), the effects of using audio resource to learn are enhanced greatly and students listening level is improved (see the discussion in part 3.2.3). From the perspective of the learners, class design using video is recognized by learners. Most learners think that multimodal class demonstration of audio and video resources by individual group and oral discussion concerning relevant topics have many advantages. 66% of learners think listening teaching designs are various in form, breaking the traditional teaching mode in which teachers give lectures and learners passively listen and the new teaching mode can enhance listening teaching effect and efficiency; 83% of students think that the materials they find is close to university students’ life, are popular with students, and evocative; 53% of students think that this teaching mode can exert their own advantages, share useful materials and excavate the latest materials. This all shows under the direction of teachers, learners further understand the self-directed learning by using video resources, more effectively plan, manage and organize listening learning, supervise and regulate their learning. As a result, their learning efficiency and effect have been greatly improved.

3.2.3 Can Multimodal Self-Directed Learning Really Improve Learners’ Listening Level and Multi-Literacy?
We are most concerned about this question. We know that learners are in favor of multimodal self-directed listening teaching mode, and their self-directed learning ability has been improved. What we wonder is that whether this new teaching mode can effectively enhance learners’ listening level and multi-literacy. After two terms of experiment, the author compares listening grades of the final exams of the experiment group and controlled group, the results are as follows:

<table>
<thead>
<tr>
<th>Table 1 Average Scores of Two Groups in Their Final Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>The first semester</td>
</tr>
<tr>
<td>Experimental group</td>
</tr>
<tr>
<td>Controlled group</td>
</tr>
</tbody>
</table>

Table 1 shows that the scores of the experimental group are obviously higher that of the controlled group. Paired sample test ($t = -6.342, p=0.000<0.05$) shows that listening scores of pre-experiment and after-experiment have significant difference. Pearson analysis ($r=0.804, p=0.000<0.05$) indicates that multimodal self-directed teaching mode is positively relative to learners’ scores. This shows multimodal self-directed teaching mode enhances learners’ listening grades greatly. Learners’ visual sense, auditory sense and tactile sense interact with each other, experience, analyze and apply multiple symbol system and ultimately enhance multi-literacy.

4. SUGGESTIONS TO LISTENING TEACHING
This study shows the achievement of listening teaching and it reflects the positive relations between multimodal teaching mode, learners self-directed learning ability and listening ability. Therefore we put forward the following suggestions to listening teaching.

4.1 Break the Routine Listening Teaching Model, and Look Listeners as the Main Body
During the experiment learners show great enthusiasm. Learners in groups look for the materials that fit for listening class, design the exercises by themselves, in fact this is also a task-based teaching. It can help increase learners’ opportunity of using target language, promote the consultation and emotional exchange between learners. It has been proved that learners can bring surprise in every class, the materials and videos they find are all about current hot topics and are popular with students, therefore the material and videos can arouse the interest of learners’ further discussion. Therefore learners’ attitude changes from boredom, anxiety to aspirations and expectations. Besides, learners’ imagination and creativity are also released. Learners of some groups design word-guessing games, lyrics-filling games etc. after listening exercises. Learners of other groups prepare for various interesting small gifts. Therefore learners’ vision sense, auditory sense and tactile sense are mobilized in relaxed and merry atmosphere, and linguistic and cultural knowledge in listening materials are also consolidated. In addition to that, students of experimental group are also active in other classes, they express their opinions actively and the class cohesion is strengthened.

4.2 Exert Teachers’ Leading Role and Reinforce Teachers’ Autonomous Learning Ability
Compared to the traditional teaching mode, teachers roles under multimodal self-directed mode are different. Multimodal self-directed teaching mode doesn’t weaken teachers’ role, instead, it gives a challenge to teachers’ autonomous learning ability. Under such teaching mode, learners will expect greatly from their teachers, that it, listening teachers’ evaluation to learners’ designed activities. Because learners collect various materials
concerning various topics, teachers have to improve their autonomous learning ability, need to know and study the current popular and hot topics. Just owing to these knowledge and understanding, teachers can put forward their original views and give inspirations and guidance to students’ learning. Listening itself is a complicated process, concerning linguistic, cognitive, cultural and social knowledge, therefore teachers need to give theoretical guidance to students’ listening learning and even English learning, and should help students change cognition that listening class is the class where teachers play recorders and students listen again and again. Multimodal self-directed learning has endowed the listening class with new connotation. Listening under this teaching mode can improve students’ other skills and help realize the virtuous circle of English learning.

4.3 Multimodal Self-Directed Learning Should Be Distinguished From Traditional Visual Audio Oral Class

Multimodal self-directed teaching model is different from traditional visual audio oral teaching mode. The former puts much emphasis on audio modality, visual sense and oral expression playing auxiliary role. Three modalities interact with each other and give brain neurons multiple stimuli, making input information internalize into parts of learners’ knowledge. In the meanwhile, learners actively participate in the whole teaching process, choose the topic they are interested in, organize classroom activity of some sessions, thus they are in the status of main body all the time in the process of classroom learning. However, visual audio oral teaching model can’t change the situation where learners receive knowledge passively and it tends to give the same emphasis to three modalities, resulting in learners catching one and lose another. Besides, the most important thing is that the ultimate goal of multimodal self-directed learning is not only to improve learners listening level, enhance their self-directed learning abilities, but also to feel the cultural difference through extensive multimodal text relevant to various topics by mobilizing visual sense, audio sense and tactile sense. In the process of making a courseware and making presentation in the class, learners tie together the five elements, language, visual sense, auditory sense and postures and space, as a result, multi-literacy ability is improved.

CONCLUSION

After the qualitative and quantitative analysis, such a conclusion can be drawn: a) Multimodal self-directed learning is popular with most of the learners. b) This teaching model can effectively improve learners’ self-directed learning ability. c) This teaching model can really improve learners’ listening level and multi-literacy. It gives us these inspirations. Multimodal self-directed learning has its advantages in listening teaching and it also has ductility, that is, it can be introduced into reading, writing courses, can help enhance teaching effects and improve self-directed learning and multi-literacy, but there exist shortcomings in using video resources. For example, in pre-experiment and post-experiment questionnaires, some learners express that images and plots in video resource can distract learners from their study or make them ignore to take notes while attracted by plots, which will have a negative effect on listening learning. This is the problem multimodal listening teaching will have to solve in the near future.

REFERENCES

Rost, M. (2002). Teaching and researching listening. Harlow, UK: Person Education/ Longman.


