



**LEARNING MANAGEMENT USING SCHEMA THEORY FOR
ENGLISH LISTENING SKILL: A CASE STUDY OF CHINESE
VOCATIONAL HIGH SCHOOL STUDENTS IN ZHEJIANG
PROVINCE**

BY

CHENJIE LI



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
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Thesis entitled

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Abstract

This study aimed to compare the vocational high school students' English listening skill before and after applying application of schema theory in English listening lessons and explore their attitude towards it. Both quantitative and qualitative methods were applied including four online lesson plans, pretest, posttest and semi-structured interview with a sample group of four grade 10 Chinese students.

The results revealed that after applying schema theory in English listening lessons, the students' pretest and posttest mean score($\bar{x}=13.50$) was higher than that of the pretest ($\bar{x}=7.50$). The responses from the students' interview on Interest and Motivation, Engagement, and Efficacy showed that all of them expressed positive attitude towards the application of schema theory in English listening lessons. The findings remarkably proved that the application of schema theory should be considered as an alternative and effective way of learning English listening skills in Zhejiang province, China.

(Total 143 pages)

Keywords: Schema Theory, English Listening Skill, Learning Achievement,
 Students' Attitude and Grade 10 students

Student's Signature.....Thesis Advisor's Signature.....

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	i
ABSTRACT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	vi
LIST OF FIGURES	vii
ABBREVIATIONS	viii
CHAPTER 1 INTRODUCTION	1
1.1 Background and Rationale of the Study	1
1.2 Research Objectives	7
1.3 Research Questions	7
1.4 Research Hypotheses	8
1.5 Scope of the Study	8
1.6 Conceptual Framework of the Study	12
1.7 Limitations of the Study	12
1.8 Terminologies	13
1.9 Expected Outcomes of the Study	15
CHAPTER 2 LITERATURE REVIEW	17
2.1 Vocational Education in China	17
2.2 Teaching and Learning English as a Foreign Language	19
2.3 English Curriculum in China	21
2.4 Teaching and Learning English Listening Skill	22

TABLE OF CONTENTS (CONT.)

	Page
2.5 Schema Theory in Teaching and Learning English Listening	30
2.6 Attitudes Towards English as a Foreign Language	37
2.7 Related Learning Theory	40
2.8 Related Research and Studies	48
 CHAPTER 3 RESEARCH METHODOLOGY	 52
3.1 Research Design	52
3.2 Target Group of the Study	54
3.3 Research Instruments	54
3.4 Validity and Reliability of Research Instruments	56
3.5 Data Collection Procedures	60
3.6 Data Analysis	60
 CHAPTER 4 RESULTS AND DATA ANALYSIS	 62
4.1 Quantitative Data Analysis	62
4.2 Qualitative Data Analysis	66
 CHAPTER 5 CONCLUSION, DISCUSSION AND RECOMMENDATIONS	 76
5.1 Conclusion	76
5.2 Discussion	79
5.3 Recommendations	81
 REFERENCES	 84

TABLE OF CONTENTS (CONT.)

	Page
APPENDICES	93
APPENDIX A Letter of Approval	94
APPENDIX B Participants' Information Sheet	96
APPENDIX C Consent Letter from Parents/Guardian	99
APPENDIX D IOC for Lesson Plans	104
APPENDIX E Lesson Plans	106
APPENDIX F IOC for Achievement Test	122
APPENDIX G An Achievement Test	124
APPENDIX H IOC for Semi-structured Interview	130
APPENDIX I Semi-structured Interview	133
APPENDIX J Pretest and Posttest Samples	135
APPENDIX K KR-20 Results	138
APPENDIX L Instrument Validators	141
 BIOGRAPHY	 143

LIST OF TABLES

	Page
Tables	
1.1 Lesson Outline	11
1.2 Timeline of the Study	11
2.1 Relationship and Difference between Two Theories	48
3.1 Instruments Used for Each Hypothesis	54
3.2 Cronbach's Alpha Rule of Thumb	59
4.1 Sample Group Achievement Test	63
4.2 Pretest & Posttest Scores of the Sample Group	64



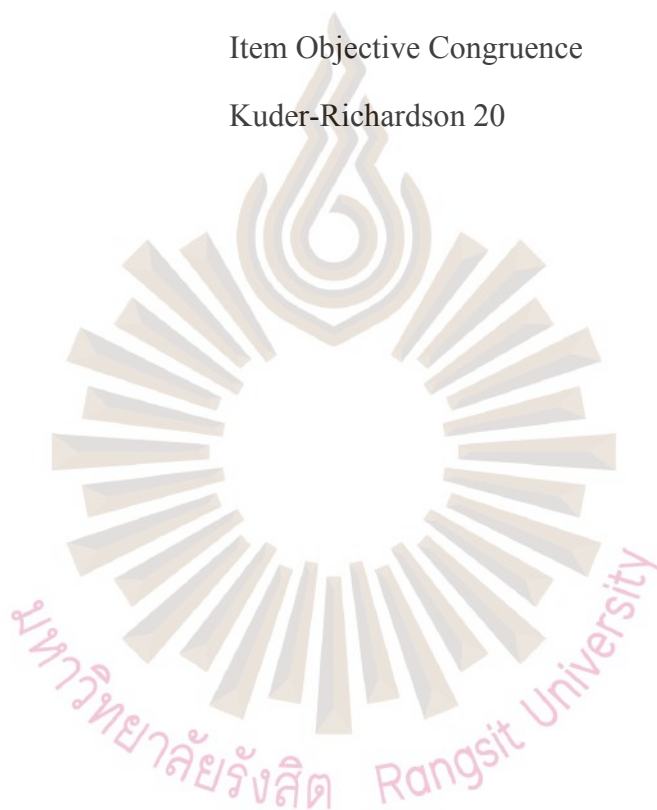
LIST OF FIGURES

	Page
Figures	
1.1 Location of the Research Setting	9
1.2 Conceptual Framework of the Study	12
2.1 An Example of Schema	32
3.1 Illustration of Research Design	53
4.1 Graphical Representation of Students' Pretest & Posttest Scores	65
4.2 Comparison of Pretest & Posttest Mean	66



ABBREVIATIONS

Abbreviation	Meaning
EFL	English as a Foreign Language
TEFL	Teaching English as a foreign language
CSE	China Standards of English
IOC	Item Objective Congruence
KR-20	Kuder-Richardson 20



CHAPTER 1

INTRODUCTION

This chapter explains the background and rationale of the study; research objectives; research questions; research hypothesis; scope of the study; conceptual framework of the study; operational definitions; expected outcomes of the study, and limitations of the study.

1.1 Background and Rationale of the Study

With the deepening of global internationalization and the popularization of English as a world language, the importance of English teaching is also gradually increasing. Especially at the end of the twentieth century, with the strengthening of the world economy and trade exchanges, communication in English became more and more frequent, and people's requirements for English listening and speaking skills are getting higher and higher.

In 1982, language educator Krashen has confirmed the importance of "listening" in the process of language teaching. Listening teaching is an important part of English teaching, which plays an important role in improving students' comprehensive language ability. Therefore, people gradually realize the importance of listening skills and the emergency to strengthen the training of listening skills.

Many scholars have carried out research on how to improve English learners' English listening ability. O'Malley and Chamot (1990) pointed out that metacognitive strategies play a potentially important role in the improvement of listening comprehension, which can help students to adjust and regulate themselves effectively in listening. And a series of English teaching methods, such as direct method, audio-visual method, TPR teaching method, holographic full sense teaching method, communicative method, task-based teaching method and so on, all show the importance of English listening teaching in the teaching process and the key to improve students' English listening ability lies in the English teaching reform.

At the end of the 1980s, English teaching in China also began to pay attention to the teaching of English listening. At the end of the 1990s, English listening was included in the scope of Chinese Gaokao, which means the Chinese college entrance examination. In recent years, in order to improve the basic English listening ability of the people in China, many scholars have also conducted related research according to local conditions in this area and have achieved good results.

Wang (2006) has pointed out that the ESA model can be used to integrate the real communicative situation into classroom teaching by designing communicative teaching tasks or activities around a certain language form, students can use their language skills to realize the communication between teachers and students and between students.

Kang (2011) wrote in his research that in listening teaching, schema plays an incomparable role compared with other theories, teachers should not only help students decode the discourse materials they hear, but also activate the existing

schemata in their minds, and guide students to actively construct new cognitive schemata, so as to really improve learners' listening comprehension.

Tian, Wang, and Zhou (2019) put forward that the teachers should make full use of the existing teaching facilities, actively adopt the multi-mode flipped classroom teaching method based on information technology, widely understand the personalized needs of students, and constantly try to carry out the teaching mode based on the actual teaching. The researchers also put forward request for students that they are supposed to gradually change from "passive receiver" of knowledge to "active discoverer" of knowledge.

The Ministry of education of China has issued the overall goal of the latest English curriculum standard, which requires schools and teachers to focus on cultivating students' comprehensive language ability. The formation of this ability is based on the systematic development of students' cultural awareness, learning strategies, emotional attitudes, language knowledge, language skills and so on (Han, 2019). In view of the fact that language knowledge and skills are the basis of comprehensive language ability, it can be concluded that English knowledge and English skills are both important to English learners.

The China's new goal of curriculum reform also emphasizes that all teaching measures should be student-centered, and the development of each student should be paid attention to in the process of education and teaching.

In order to actively develop vocational education and vigorously promote the reform of talent training mode of higher vocational education, the China's Education

Department of the State Council formulated the opinions of the Ministry of education on strengthening talent training in higher vocational education. The policy requires that in all kinds of vocational schools, cultivating talents is the fundamental task, teaching work is the central work, teaching reform is the core of various reforms, and improving quality is the eternal theme. The reform of curriculum and teaching content system is the key and difficult point of teaching reform in vocational schools. Therefore, teaching should reorganize the curriculum structure, update the teaching content, teach students according to their aptitude, actively implement heuristic and discussion teaching, encourage students to think independently, stimulate their learning initiative, and cultivate students' scientific spirit and innovative consciousness.

And the group of vocational high school students in China, who are not enrolled by ordinary high school, because their academic performance is not outstanding, are easy to be ignored by researchers and scholars in the teaching process. The new curriculum objectives require that vocational high school students should also receive enough and equal attention so as to improve their learning performance.

Vocational high school is a type of vocational education school in China. The difference between vocational high schools and regular high schools is that vocational high schools concentrate on developing employees and practitioners with intermediate occupational skills. Ordinary high schools are not separated into majors. Vocational high schools are divided into majors. Students at vocational high schools must meet the following requirements: have the necessary knowledge, professional ethics, and operational abilities to engage directly in a specific profession; and for basic cultural courses, they must have a level equivalent to that of ordinary high schools.

Generally speaking, junior high school graduates will give priority to ordinary high schools based on their grades. For students whose academic performance is not ideal, they will choose to enter a vocational high school. They will be more inclined to learn a vocational skill as early as possible in order to deal with the future competition. Therefore, vocational high schools pay little attention to English ability, especially the level of English listening.

For example, in the process of listening, vocational school students will encounter the following problems. They can only hear individual words, but there is no way to understand the whole listening material. Many teachers encourage students to memorize a lot of words. As a result, students memorize a lot of words and spend a lot of time, but the number of words they really understand in listening has not expanded. Because language is not isolated sounds, words and sentences, but an organic system for the purpose of expressing concepts and meanings (Liu, 2011). Schema is essentially a psychological structure, a cognitive structure that can help people perceive, organize, obtain and use information (Wang & Yang, 2011, pp.188-189). If the knowledge structure accumulated in students' minds is insufficient, they are not able to activate schemata well and therefore better understand listening materials.

But it also means that due to more limitations such as the teacher's English proficiency and the school's teaching infrastructure and resource constraints, there is still a lot of room for improvement in vocational high school English listening teaching in actual teaching.

Therefore, this investigation and research focused on the analysis of the

disadvantages of the vocational high school students in the past, and the cause for their difficulty in learning, so as to help them to improve English listening skills. In this thesis, schema theory was applied to better overcome listening problems. The so-called schema theory refers to the theory based on the representation and storage of knowledge organized around a topic. The main points of schema theory are as follows:

1) Schema describes knowledge with a certain degree of generalization, not definition. In other words, schemata not only describe the necessary characteristics of things, but also include their unnecessary characteristics.

2) The knowledge described by the schema consists of one or several parts combined in a certain way, and the components are called variables or slots. For example, animal schemas include skin, activity, eating food and breathing air; Bird patterns include wings, feathers, flying, etc. In short, a symbol, an object, etc. can be regarded as a schema.

Teachers can choose one or more specific teaching methods according to specific situations, such as organizing activities and activating the original schema; providing a schematic framework to enrich the content of illustrations; removing language barriers and expanding language schemata; paying attention to language structure and enrich formal schema; strengthening the expansion and extension, and consolidating various schemas.

English listening comprehension accounts for a large proportion of English learning achievement. On the basis of schema theory, this study took vocational high school students as the research subjects, not only helped them realize their shortcomings in listening comprehension, but also helped them use the theory to

improve English listening skills and English comprehensive ability. Through the analysis of listening comprehension problems, this paper aimed to find out the difficulties of vocational high school students with learning difficulties in solving English listening skills, so as to improve students' listening comprehension ability and analytical ability.

Therefore, this thesis aimed to give EFL education students in China especially in vocational high school relevant experience and learning suggestions. The research results of this paper provided students with ideas on English listening skills, helped them better analyze English listening materials through schema theory, establish the awareness of accumulating previous knowledge structure, pay attention to knowledge accumulation in daily life and learning, and actively use English listening skill, so as to improve English listening ability and overall English level.

1.2 Research Objectives

1.2.1 To compare English listening skill of vocational high school students in Zhejiang province before and after the application of schema theory.

1.2.2 To explore vocational high school students' attitude towards the application of schema theory in English listening lessons.

1.3 Research Questions

1.3.1 Would English listening skill of vocational high school students in Zhejiang province become higher after the application of schema theory?

1.3.2 What kind of attitude would those vocational high school students have

towards the application of schema theory in English listening lessons?

1.4 Research Hypotheses

1.4.1 Vocational high school students' English listening skill would be higher after applying schema theory.

1.4.2 Vocational high school students would have positive attitude towards the application of schema theory in English listening lessons.

1.5 Scope of the Study

This study was to conducted within a particular scope as described here; therefore, generalization of the results must be taken with caution, especially in the contexts of different educational levels and with the use of different research instruments.

Firstly, the context was at one of the vocational high schools in Zhejiang province, China. In addition, the data was to be collected from grade 10 students of that particular school through their test results and interviews.

Secondly, in Zhejiang province, teachers are provided with a standard teaching reference book to carry out learning activities while teaching English, however, they have the liberty to design and execute their own learning materials as per the needs and interests of the students. Therefore, through this study, the researcher was to propose the use of selected network teaching resources as one of the learning materials to compare students' English listening skills.

1.5.1 Location of the Study

The study was carried out by online teaching and online study, and the sample group students were from one of the vocational high schools in Zhejiang province. The school is located in the central house of Lushan Street, Shengzhou City, Shaoxing City, Zhejiang Province, close to the city center and convenient transportation. The school covers an area of 143 acres, with a building area of 49,000 square meters, 3,300 students. The school consisted of grades ranging from grade 10 to grade 12. In view of the case study method was to be adopted in this study; therefore, only 4 students were purposively selected as the research sample. The site of the research school is depicted in Figure 1.1.

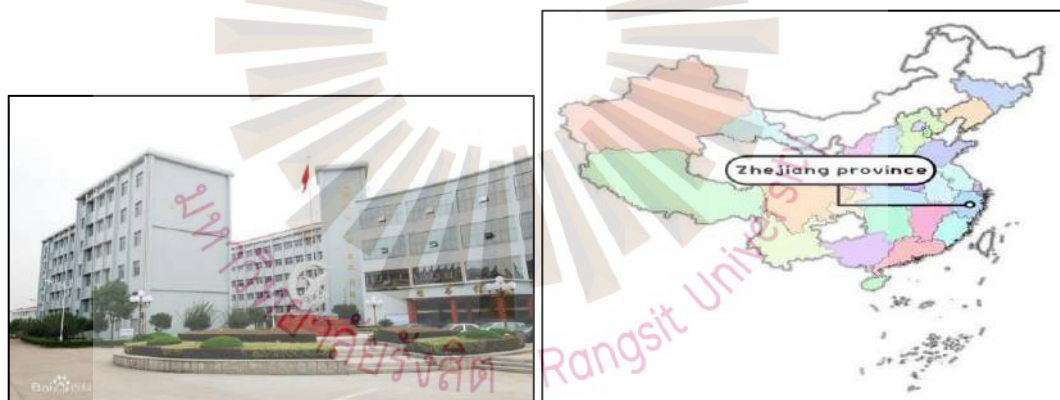


Figure 1.1 Location of the Research Setting

Source: Baidubaike, 2022

1.5.2 Target Group

Target group: The researcher was assigned by Shengzhou Secondary Vocational and Technical School to teach only one online class of 4 students in 2021

Academic Year. Two of them were male and the other two were female. For the convenience of research and confidentiality of the sample group' information, G1 and G2 represented these two females, and B1 and B2 represented the other two males respectively.

1.5.3 Content of the Study

For this study, the researcher developed four lesson plans and each lesson plan included 2 sessions, so totally there were 8 sessions. Each session lasted for 40 minutes and would be finished in a week, so in total the research involved the teaching classes for 4 weeks. The materials of the lessons included English listening test papers which consisted of pre-listening test and post-listening test. The learning activities were developed based on the theme and the content of the research materials.

The sample group were taught using schema theory and asked to do the test paper before and after the study to examine whether they had any improvements in their listening skills after the intervention. The teaching materials were selected according to the course standard requirements of the school setting. The first two lesson plans were designed to improve students' listening comprehension skill. The last two lesson plans were designed to improve students' listening analytical skill. Table 1.2 below outlines of the lessons taught.

Table 1.1 Lesson Outline

SL. No	Sessions	Date/Time
1	Session 1: A Child's Angel (1) http://www.kekenet.com/menu/201408/321963.shtml	06/11/2021
	Session 2: A Child's Angel (2) http://www.kekenet.com/menu/201408/322329.shtml	07/11/2021
2	Session 3: So Much to Learn (1) http://www.kekenet.com/menu/201408/323722.shtml	13/11/2021
	Session 4: So Much to Learn (2) http://www.kekenet.com/menu/201408/324291.shtml	14/11/2022
3	Session 5: The Time Account (1) http://www.kekenet.com/menu/201409/326440.shtml	20/11/2021
	Session 6: The Time Account (2) http://www.kekenet.com/menu/201407/312343.shtml	21/11/2021
4	Session 7: Hints for Those That Would Be Rich (1) http://www.kekenet.com/menu/201407/312343.shtml	27/11/2021
	Session 8: Hints for Those That Would Be Rich (2) http://www.kekenet.com/menu/201407/312729.shtml	28/11/2021

1.5.4 Time Frame

The study was conducted on the month of October, 2021. It lasted for 4 weeks (one lesson/two sessions in a week). The whole study took about 16 weeks. The research procedures followed the time line shown below.

Table 1.2 Timeline of the Study

Activities	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Literature Review										
Research Proposal										
Data Collection										
Data Analysis										
Final Defense										

1.6 Conceptual Framework of the Study

For this research, the independent variable was schema theory, and the dependent variables were vocational students' listening skill improvement and attitude towards the use of schema theory. The illustration of the conceptual framework of the study is given below:

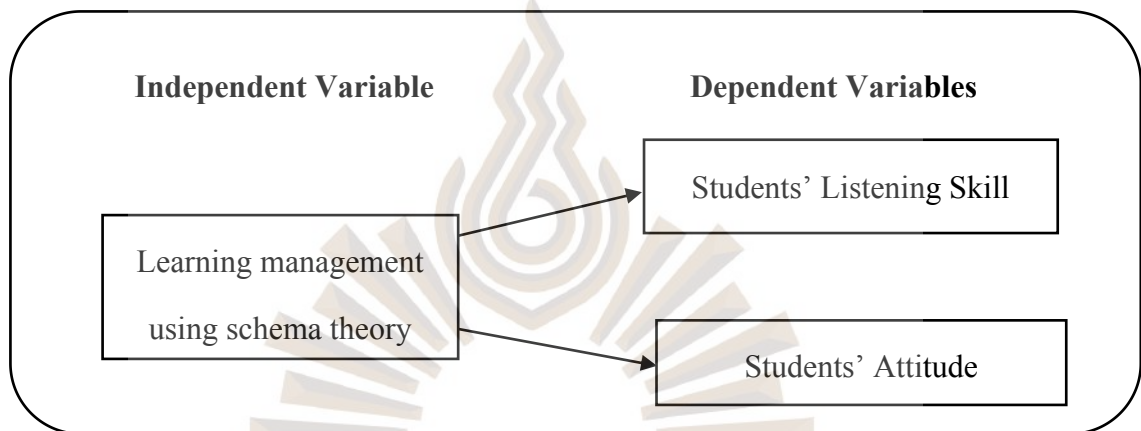


Figure 1.2 Conceptual Framework of the Study

1.7 Limitations of the Study

The study was expected to examine the use of schema theory in improving the English listening skill with vocational high school students in China as well as their attitude towards it. However, there were some limitations of the study that are needed to take into considerations as below:

- 1) This study was confined only with four students in a school in Zhejiang Province, China; thus, it was not possible to generalize the results with all vocational students in China as a whole.
- 2) This study was carried out only for four weeks. Therefore, the results might be different from the study which is conducted in a longer period of

time.

3) This study was conducted in a form of online class so; the results might not be generalized in other teaching contexts such as fact-to-face classes and so on.

1.8 Terminologies

Schema theory: A schema is a pattern of thought or behavior that organizes categories of information and their relationships in cognitive science (DiMaggio, 1997). In this paper, schema refers to the language schema in schema classification. Its relationship with language teaching would be studied.

For example, in English teaching, teachers can apply language schemata to word explanation, which can greatly improve the teaching efficiency. For example, with the help of high-frequency word schemata, the so-called high-frequency words are the basic and core vocabulary in textbooks. Building high-frequency word schemata can help students build high-frequency word network, and through "contacting" core words, they can constantly consolidate students' English foundation, It can also deepen the memory of core words and expand students' vocabulary, so as to improve their English vocabulary performance.

Listening Skills: refers to the way in which learners receive information from others in order to achieve certain goals or obtain their opinions, intentions, hopes and opinions. In this thesis, it means students use schema to better comprehend and analyze the listening materials. Comprehension skill and analytical skill were the focus of students' cultivation in this study. Achievement test was the instrument to measure these two listening skills.

Attitude: In this thesis, attitude mainly include three parts. Firstly, it includes vocational high school students' interest and motivation towards English listening skill teaching and learning based on schema theory. Secondly, students' engagement in this course should be taken into consideration. Thirdly, how do these students consider its efficacy of schema theory on English listening skill learning are also one of important parts. Semi-structured interview was the instrument to be useful to measure students' attitude in this study.

Case study: According to Merriam-Collegiate Webster's Dictionary (2014), it is an in-depth examination of an individual unit (such as a person or a community), with a focus on developmental elements in relation to the environment. In this thesis, it means this thesis specifically studied the effectiveness of schema theory in English listening skill courses. The research subjects were four grade 10 vocational high school students in Zhejiang province with mixed genders and abilities. And the case study aimed to obtain detailed research findings by quantitative analysis method, qualitative analysis method and mixed method.

Vocational High School: It refers to a type of vocational education school in China in this thesis. The difference between vocational high schools and regular high schools is that vocational high schools concentrate on developing employees and practitioners with intermediate occupational skills. Ordinary high schools are not separated into majors. Vocational high schools are divided into majors. Students at vocational high schools must meet the following requirements: have the necessary knowledge, professional ethics, and operational abilities to engage directly in a specific profession; and for basic cultural courses, they must have a level equivalent to that of ordinary high schools.

Grade 10 students: refer to 4 grade 10 students with Chinese nationality at Shengzhou Secondary Vocational and Technical School which is located in Zhejiang province. They were purposively selected as a sample group of the study.

1.9 Significance of the Study

At the moment, the first priority which should be given to China's education is to improve students' comprehensive abilities in using English listening skill. That means, from the point of English teaching, to cultivate students who are capable of listening, speaking, reading and writing English.

According to Education of China (1999), "dumb English" and "deaf English" have always been the key problems for English teaching in China. And "dumb English" results from the lack of the teaching of English listening comprehension skills. Over the past few years, teachers in China have applied new English teaching materials, at the same time, listening test has been included in China's high school and college entrance examination. As a result, Chinese English teachers are now paying great attention to the teaching of English listening. To find a way of improving students' English listening comprehension rationally and efficiently is the common target for the Chinese English teachers.

However, students with English learning difficulties in the grade 10 have always been unsatisfactory in English due to various reasons of themselves and the outside factors. From a pragmatic perspective, this article focused on the listening comprehension difficulties of students with English learning difficulties and helped them improve it.

In recent years, the improvement of English listening ability has become the major task for high school students. Chinese educational community has attached great importance to the teaching of English listening.

There is an old Chinese saying called looking at the old at the age of three, which means that through the behavior of a three-year-old child, you can feel what kind of person the child will be in the future. More profoundly, a person's behavior and habits affect his life. As a new high school student, it is particularly important to cultivate good learning habits, including English listening habits.

How to help them quickly cultivate good learning habits is an urgent task. Because of this, the author believes that it is necessary to take the teaching of listening comprehension for grade 10 vocational high students with English learning difficulties as the research object. Specifically, the research of this article has three meanings as follows:

- 1) English teachers can better understand the learning situation of grade 10 English learners in vocational high school, and take more effective teaching measures according to different students.

- 2) Grade 10 English learners can overcome their English listening difficulties with the solutions specified by teachers.

- 3) The theoretical research of listening skills at vocational high schools will be enriched, which will provide other English teachers with relevant experience.

CHAPTER 2

LITERATURE REVIEW

This chapter presents vocational education in China, teaching and learning English as a foreign language, English curriculum in China, teaching and learning English listening skill, schema theory in teaching and learning English Language, attitude towards English as a foreign language, related learning theory and related research and studies.

2.1 Vocational Education in China

In China, vocational education is defined as education that enables students to acquire the professional knowledge, skills, and ethics required for a certain profession or productive labor.

The goal of vocational education in China is to develop skilled workers, laborers, and builders who have a particular level of cultural awareness as well as professional knowledge and skills. Vocational education, as opposed to general and adult education, concentrates on the development of practical skills and work aptitude. The development modern vocational education in China only has a history of more than 150 years. From the perspective of the development history of school vocational education, the establishment of Fujian Shipping Institute in 1866 was the start of China's vocational education (Zhu, 2006).

In the past 150 years of history, the pursuit of equality with general education has always been the pursuit of vocational education (Xu, 2018). Since the reform and opening up, the development of China's vocational education policy has experienced three stages: the adjustment phase of secondary education structure (1978-1995), the diversified exploration stage of vocational education (1996-2010), and the stage of establishing a modern vocational education system (2010-present) (Qi et al, 2018).

Therefore, in the new era of comprehensively deepening reform, China's Implementation Plan of National Vocational Education Reform puts forward the policy direction of classified reform of vocational education, and makes it clear that "vocational education and general education are two different types of education with their own advantages and they have equally important position."

This important declaration makes it clear that vocational education is a type of education, not a level of education. It is an important symbol for the government to give full play to the ability of vocational education to serve society and personal development.

According to the 2019 Zhejiang Provincial National Economy and Development Statistical Bulletin offered by Zhejiang Provincial Bureau of Statistics (2020), as of the end of 2019, there were 245 secondary vocational education schools of various types in Zhejiang Province (excluding technical schools), with an enrollment of 199,000 students and the internal students were 542,000.

2.2 Teaching and Learning English as a Foreign Language

2.2.1 Teaching English as a Foreign Language

The term "foreign language" refers to a language spoken by non-native speakers who are not local to the area. In China, for example, English is a foreign language. It can also apply to a language that is not spoken in one's home country; for example, Chinese is a foreign language for an English speaker residing in China.

The 21st century is an interdependent world among countries and nationalities in the world. Mastering the international common language is a requirement for global scientific and technical advancement, as well as national economic development and cultural interchange. English has been widely and deeply used in science and technology, business, medical care, sports, and other disciplines as a trade language, auxiliary language, and international language. Foreign trade communication, international etiquette, letters and telegrams, import and export documentation, contract signing, and other activities all use English as the standard common language, and English has firmly established itself as the undisputed preferred language.

Teaching English as a foreign language (TEFL) has a long history. TEFL certificate, a professional qualification standard for teachers, has even been formulated internationally for the teaching of English as a foreign language. Because of its effectiveness and authority, TEFL certificate has been applied to more than 150 countries and regions.

Language is the carrier of culture. The process of language teaching is also the process of cultural communication. In the process of English as a foreign language teaching, culture teaching also follows. The combination of language teaching and culture teaching is also an important feature of teaching English as a foreign language.

2.2.2 Learning English as Foreign Language

There are many factors affecting foreign language acquisition, such as the age of foreign language learners, the interference of mother tongue, individual physiological and psychological differences of learners and environment (Chen, 2020).

Mastering language knowledge and skills, internalizing language information and skills, and obtaining the impact of automatic language output are all part of the complicated psychological process of learning a foreign language. Metacognitive methods can help speed up the internalization process, according to studies on metacognition and learning (Chen & Zeng, 2007). All learners utilize strategies, according to Chamot and Kupper's (1989) research. The benefits and drawbacks of utilizing techniques are determined by the learners' ability to self-evaluate and regulate their learning. As a result, effective learners of English as a second language are frequently outstanding learners of learning methodologies.

Richards and Schmidt (2002) once defined the language environment as "the oral language encountered by learners in the educational and social environment, and can be used as the potential listening input in the language learning process." This also strongly shows the importance of a good English environment for English as a

foreign language learner.

Gender is one of the determining elements when learning English as a foreign language. Women outperform males in linguistic fluency, perceptual speed, action coordination, object position memory, and mathematical computation, according to Kimura (2007), who summarized the studies on gender differences in ability. Second, women have similar language advantages while learning a foreign language. Payne and Lynn (2011) compared men and women's reading comprehension performance in foreign language learning and discovered that even when the subjects' mother tongue's reading comprehension level is strictly controlled, women's reading comprehension performance in foreign language learning is still superior to men's. The concept of English as a language also applies to learning English as a foreign language.

2.3 English Curriculum in China

In China, formal English teaching generally starts from the grade 3 of elementary school. The curriculum standards are uniformly promulgated by the Ministry of Education. Compulsory education has compulsory education English curriculum standards, ordinary high schools have ordinary high school English curriculum standards, and vocational education has vocational education English curriculum standards. In the junior high school entrance exam, high school entrance exam, university entrance exam, graduate entrance exam, English are all compulsory subjects and English scores occupy a large proportion.

In daily English teaching, teaching will be divided into eight main aspects:

listening, speaking, reading, writing, phonetics, vocabulary, grammar, and text. With the development of the times, English teaching has gradually got rid of traditional teaching methods, and multimedia-assisted teaching has become an effective educational method. With the development and update of teaching and learning concepts, the classroom has gradually changed from being teachers-centered to being students-centered. In the process of English teaching, students give full play to their cognitive abilities through participation, experience, interaction, communication and cooperation.

2.4 Teaching and Learning English Listening Skill

The improvement of listening comprehension is restricted by many factors. Compared with other language skills, listening skills belong to a higher level of practical language ability. It requires learners to make a rapid response, correct understanding and continuous memory to what they hear in a very short time. It reflects learners' comprehensive language knowledge and psychological adaptability. Therefore, listening skills can never be really improved by simply listening for the sake of listening without skills and ignoring the accumulated cultivation and training of practical language ability (Chen, 2005). In order to improve listening teaching and rapidly improve students' listening ability, teachers must have a basic understanding of English listening and teaching skills, find problems in English listening skills teaching and update teaching methods.

2.4.1 Modes of Listening Process Related with Schema

The modes of listening process originate from information processing modes

of cognitive psychology. “The process of interpretation is guided by the principle that every input is mapped against some existing schema and that all aspects of that schema must be compatible with the input information.” (Carrel & Eisterhold, 1988) In other word, the process of listening comprehension is the interaction between new information and relevant prior knowledge. Based on schema theory, listening process is split into three modes: bottom-up mode, top-down mode and interactive mode.

1) Bottom-up mode, which is also called data-driven processing, “is evoked by the incoming data, and the data enter the system through the best fitting, bottom-level schema” (Carrel & Eisterhold, 1983). Generally speaking, the listening process starts from the smallest language units. The bottom-up mode can be illustrated like this: sounds, pronunciation, intonation, words, phrases, clauses, meaning. As is shown above, listeners decode the information that speakers conveyed from sounds, pronunciation and intonation. They make a lot of effort to catch every word they received, and then unify words into phrases, and finally decode meaning of the text. Students tend to adopt this listening mode if there is no sufficient related background knowledge matching with what they heard. Also, this is the most frequently-used teaching mode in listening class where teacher focuses on linguistic knowledge, such as vocabulary, grammatical structures, and seldom focuses on non-linguistic knowledge. However, its obvious defects cannot be ignored. Nunan (1998) states that this mode assumes that listening is a process of decoding the sounds that one hears in a linear fashion. It is possible to lower the speed of listening comprehension if listeners encounter the sophisticated communication.

2) Top-down mode, which is also called concept-driven processing, “occurs as the system makes general predictions based on higher level,

general schema and then searches the input for information to fit into these partially satisfied, higher order scheme” (Carrel & Eisterhold, 1988). The illustration of top-down mode is as follows: Related prior experience, listening materials, meaning sounds. Instead of decoding the form in bottom-up mode, this mode focuses on reconstructing meaning. “In this reconstructing process, the listener uses prior knowledge of the context and situation within the listening takes place to make sense of what he or she hears.” (Nunan, 1991) During this process, non-linguistic knowledge plays an important role in listening comprehension including interest, motivation, expectation and language intuition, etc. Students tend to use this mode when they are familiar with the listening materials, which help students make a quick response to the incoming information and save a lot of time. But top-down has its drawbacks. The importance of linguistic knowledge may be neglected. It is impossible to activate background knowledge if there is not enough knowledge about sounds, intonation, vocabulary and grammatical structures.

3) Interactive Mode. Listening comprehension is an interactive process between input information and related prior knowledge. Top-down mode is suitable for the listening materials which listeners are familiar with and have enough background knowledge to understand the topic. Also, listeners need to be skillful, proficient and are able to decode information by reconstructing meaning. While, bottom-up mode is suitable for listening materials which listeners are unfamiliar with. Listeners need decode information from sounds to meaning which takes a lot of time. Since both bottom-up mode and top-down mode have drawbacks and cannot reach accuracy and efficiency in listening comprehension on its own. During the listening process, students need combine bottom-up processing and top-down processing together, which is called interactive process. “Both top-down and bottom-up

processing should be occurring at all levels simultaneously. They work together to pull the various fragments of knowledge and information into a coherent whole.” (Rumelhart, 1980, as cited in Carrel & Eisterhold, 1983, p. 557) The bottom-up processing decodes the form of input information into the smallest language unit, and then unifies sounds into words and phrases until get the meaning of the text. Meanwhile, top-down processing helps listeners activate prior knowledge, clarify the ambiguities and reconstruct the input information.

2.4.2 The Function of Schema Theory in Listening Process

Firstly, schema theory plays guiding role in listening process. In the process of interpreting listening content, schema theory emphasizes two basic ways: bottom-up and top-down processing. Bottom-up refers to the rise from details (such as a word or phrase) to the sentence level, and then to the overall understanding of the text. This way can make the listener pay attention to the information that the new information is inconsistent with the expected content. This method is conducive to cultivating the feeling of correct pronunciation, intonation, speed and rhythm, and then rise to establishing the connection between new information and known information, and finally understand its significance. The top-down way is to understand the whole first, listen to the main idea, and then to the details. This way can accelerate the absorption and assimilation of information, help the listener eliminate ambiguity and make choices when the input information has different interpretations. This method can cultivate the listener's ability to speculate and judge the context and intonation. These two approaches complement each other in the process of listening.

Secondly, schema theory plays predictive role in listening process. Prediction

means that the listener predicts the content to be heard according to the existing information in the process of listening. If the prediction is confirmed, its content is easy to understand; If the prediction is not confirmed, it indicates that the listener's prediction has deviation, which will stimulate the listener to correct the deviation and make positive preparations for a better understanding of the language.

Thirdly, schema theory plays supplementary role in listening process. In some cases, some unspoken and pre-metaphorical contents may be omitted from the listening materials. At this time, if the corresponding schema knowledge is started, some omitted information can be added in the process of understanding. As a kind of psychological organization, schema gathers the knowledge about the specific composition of things, such as the spatial composition, time composition and plot composition of events. These knowledge structures have strong integrity, and their internal relations are very close, which plays an important role in the understanding of language (Wang, 1999). This supplementary role of schema should be brought into play smoothly. It requires readers to pay attention to the accumulation of knowledge in order to expand and supplement their schema structure.

2.4.3 Classification of English Listening Skills

As early as 1983, Jack Richard listed 44 kinds of subtle listening skills based on the analysis of listening process. Here are five of them: 1) Ability to remember languages of different lengths in a short time. 2) Ability to distinguish between different sounds in the target language. 3) Ability to recognize word stress. 4) Ability to recognize pronunciation rhythm. 5) Ability to adjust listening strategies to different types of listening goals or objectives. According to Jack Richard's opinion and the

contents involved in the 18 skills related to listening skills in the English classroom, such as the ability to identify the purpose of listening and the scope of classroom teaching content, the ability to identify the relationship between various units in the whole chapter, the ability to identify connecting sounds, etc., it can be seen that the improvement of English listening level is the reproduction of a variety of comprehensive abilities. It is quite difficult to list all listening skills one by one, but it is not difficult to see from the categories listed above that Jack Richard made a constructive attempt in developing a specific classification of listening skills, which is very helpful for teachers to design listening activities.

Oxford (1990) briefly summarizes the classification of language learning strategies applied to listening skills into the following points 1) Practice, repeat, practice phonation and writing, identify and apply idiomatic sentence patterns and sentence patterns, natural imitation. 2) Receive and send information, quickly obtain information, and use resources to receive and send information. 3) Analysis and reasoning, deductive reasoning, analytical expression, comparative analysis, translation, transfer, creating input and output structures, taking notes, summarizing and emphasizing.

Interpreting listening skills from a new pedagogical point of view, Field (1998)'s understanding of listening skills is as follows: 1) recognition: the ability to subtly distinguish different words, such as hurt, heart. 2) Division: the ability to recognize words. 3) Expectation: the habit of predicting the exact meaning of words and the total thought of paragraphs. 4) Inference: the ability to spell unknown words. 5) Reference: the ability to recognize words according to part of speech, pronunciation and other related known conditions.

The standards in CSE, China Standards of English, will be separated into nine tiers. Levels 1 and 2 typically equate to primary school, level 3 to junior middle school, level 4 to senior high school, levels 5 and 6 to universities, level 7 to English majors, and level 89 to top-tier foreign language talent. Each level has its own set of criteria for hearing, speaking, reading, and writing, as well as translation and knowledge approach.

According to this standard, high school students are required to understand the common language materials in general social occasions, grasp the theme and main content, grasp the main facts and views, and understand the intentions and attitudes of others. This paper will attach importance to students' comprehension skill and analytical skill.

2.4.4 Approaches to Improve English Listening Skills

In order to improve students' English listening level, many scholars have put forward their own teaching methods of English listening skills.

Cui (2013) believes that teachers need to pay attention to students' emotional changes and understand students' psychological state; Strengthen the training of basic knowledge and pay attention to pronunciation teaching; Carry out listening training and teach listening skills, such as making good preparations before listening, browsing the test questions at the fastest speed before listening, understanding the question type, question direction and the meaning of options, making full use of the intermittent time in listening, trying to guess the contents that may be involved in the recording and grasping the key points, so as to improve the efficiency of answering

questions. In the process of listening, pay attention to the overall content of the recording. While listening, students should learn shorthand.

Chen (2004) asked English teachers to pay attention to basic knowledge training. When the language environment resource is rich, vocabulary is the main communicative function compared with grammar. Wilkins (1972) also pointed out that "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed." The importance of vocabulary can be seen from this. It is also necessary for teachers to provide training in English thinking ability. When learning and using English, many students have no sense of English language and English thinking habits, resulting in auditory errors and discontinuous information. In order to change this situation, on the one hand, teachers should try their best to teach in English and strive to create a classroom English learning environment; On the other hand, while imparting the necessary language knowledge, teachers should strengthen the comprehensive training of listening, speaking, reading and writing, cultivate students' English language sense, enable them to establish a new English language system in a large number of language practice, and form the habit of using English thinking as a means of understanding. In listening practice, modern teaching methods such as computer and multimedia can play a great role. Teachers can collect some audio-visual materials closely related to teaching materials or daily life to serve teaching. In this way, it can not only improve students' listening comprehension ability, but also better mobilize students' enthusiasm, stimulate their interest in listening training, and cultivate students' good study style of thinking hard and being good at evaluating the content through listening activities.

Liu (2007) puts forward skill teaching method. Skill teaching method plays a

vital role in listening teaching. Firstly, several basic components of listening ability are classified to help us more clearly understand the objectives to be achieved and the activities that teachers should design in listening class. Secondly, skill teaching method can provide effective remedial practice for recognizing the failure of certain skills. The most important thing is that learners' listening skills have been improved in skill teaching method.

2.5 Schema Theory in Teaching and Learning English Listening

2.5.1 The Definition of Schema Theory

The word schema is derived from Greek, meaning that it is expressed by images and appearances. German philosopher Immanuel Kant first put the concept "schema" in 1781. This concept was applied to the field of philosophy. He believes that the schema acts as a bridge. It links the two major areas of the human brain, the concept and the perception of object. He also proposed the concept of cognitive schema on the basis of this concept. At the same time, he also pointed out that the only way for a schema to have practical meaning is to integrate it into what people already know and make them connected. In other words, only when the images of things have a certain reflection in the human brain and are connected with each other, can the schema show its own characteristics.

The concept of schema put forward by Kant has become the cornerstone of later scholars. Later, Gestalt psychologist Bartlett (1932) first expanded the "schema" in the field of psychology in the 1930s. His research is a milestone in the research history of schema theory.

Piaget (1952)'s theoretical research shows that schema theory has pushed forward a new process. He believes that schema is an important concept used to explain cognitive structure. He believes that "schema is a mode of behavior or mode of thinking. It can be organized and implemented repeatedly. Therefore, all repeatable modes of behavior or generalization of psychological structure are called schema". " Schema is one of the basic units of cognitive structure. Everyone's schema constitutes all his cognitive structures ".

An important step in the development of schema theory was taken by the work of Rumelhart (1977). He thought the existing schema in people's brain will influence or dominate its understanding of new information. Therefore, when people learn something new, they are easy to connect it with something they have already known and find some relevance to help to understand the new information.

The definition and study category of schema theory differ from person to person. Liu (2015) drew some basic features of schema theory. Firstly, it exists in people's mind perpetually. Once it is formed, no one can take it away. Secondly, its basic principle is to activate prior knowledge, process new knowledge and construct new knowledge or new schema. Thirdly, it is not fixed but changeable and can be adjusted. That is to say, it has limitless variation. Fourthly, it is radial and structural. It is a huge system, not a separate unit.

Schema is the representation and storing of knowledge structured around a topic in a nutshell. People must learn and grasp a great deal of information during their lives. These collections of information are not haphazardly stored in people's heads, but rather are linked together around a common theme to form a single

knowledge unit. This is a schema unit. When we see a picture of an animal, for example, we can immediately recall its name, disposition, living habits, and a variety of other details about the animal. This demonstrates that an animal's physical qualities are linked to its name, temperament, lifestyle, and other associated facts stored in the human brain. Therefore, schema is actually a cognitive model of knowledge. Schema theory studies how knowledge is represented. And the theory of how this representation of knowledge is conducive to the application of knowledge in its unique way. The Figure 2.1 can be an example of schema.

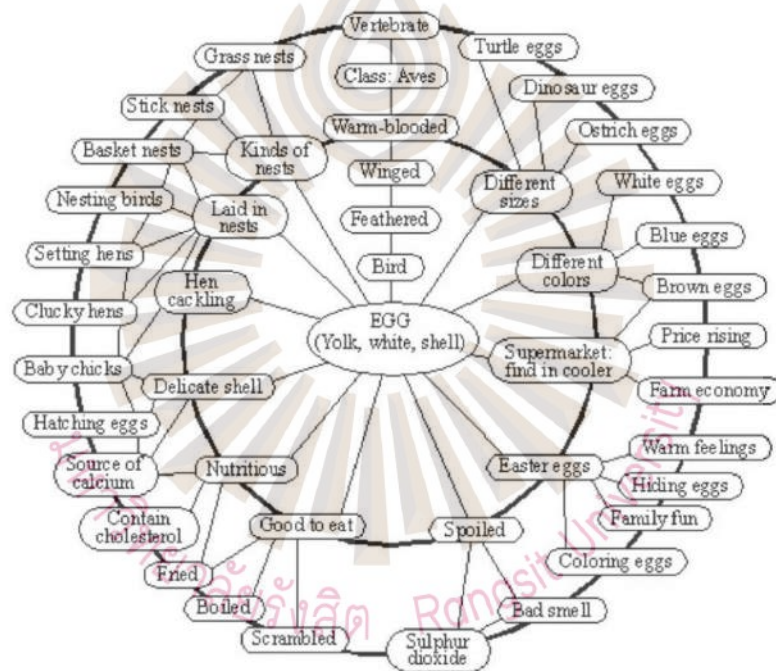


Figure 2.1 An Example of Schema

Source: Baidubaike, 2017

2.5.2 The Types of Schema

Schema can be further divided into three categories: language schema, content schema, and rhetorical schema. This paper focuses on the application of language

schema in vocational high school English listening comprehension.

Language schema refers to the language knowledge about pronunciation, vocabulary, grammar, pragmatics and text that students have mastered. Language knowledge plays an important role in foreign language listening. It is the foundation of listening comprehension (Liu, 2007). If a listener does not have the knowledge of the corresponding language schema, he will not have the most basic ability to decode the input listening materials. Therefore, ample language knowledge is the prerequisite and foundation of listening.

Content schema, also known as topic schema, refers to background knowledge and social and cultural knowledge related to the content of the topic. If the listener has enough language schema, but he is unfamiliar or lacks cultural background knowledge related to the material. Then, he can't tune out the content schema corresponding to the content, and his listening comprehension is incomplete (Ma, 2003). In another words, the more content schema in the students' minds, the more complete they are, the more they can correctly understand the meaning of the material when they are listening. Anderson (1985) also believed that the more content schemas relevant to the text content are mastered by readers, the stronger their reading comprehension ability, information storage ability, and ability to recall letters. Therefore, in ordinary teaching, students should accumulate more knowledge in various aspects to have enough content schemas in their brains.

Rhetorical schema refers to the knowledge of the genre and text structure of the material. If students have knowledge of rhetorical schema, they should have a better understanding of the discourse structure characteristics of narratives,

argumentative essays, expository essays, and various practical essays such as letters and notices will help students understand the main content of the material according to the chapter structure of different genres (Wang, 2002).

Among the three schemata, language schema is the basis of the other two schemata. Without mastering the corresponding language schema, the listener does not have the ability to recognize words, phrases and sentences in the material, nor the ability to use the clues and information provided by the material to call the corresponding content schema and rhetoric schema, let alone the understanding of the material. Rhetoric is also particularly important. They determine the students' understanding of the material. On the one hand, they play a predictive role: it can help the listener consider the context, eliminate ambiguity, predict the context, and provide reference and guide for accurately interpreting the text content. In the process of listening, the information entering the auditory system not only uses the necessary language schemata such as pronunciation, vocabulary and grammar, but also mobilizes the content schema and genre schema in the brain to think, assume, analyze, synthesize, judge and reason, verify and modify the hypothesis, and complete the reorganization and construction of meaning to achieve the purpose of understanding (Huang, 2014).

2.5.3 Application of Schema Theory in English Teaching and Learning

Listening, speaking, reading, writing and translation are the basic skills to be cultivated in the process of English teaching and learning. How to improve learners' five skills has always been one of the long-term research goals of educators and linguists. Traditional English teaching focuses on strengthening the cultivation of

students' vocabulary and grammar. In class, after teachers translate and explain, learners learn in the form of simple "receiving". Students are often in a state of passive acceptance and indoctrination, so it is easy to produce the phenomenon of negative indolence in English learning. With the proposal and continuous improvement of schema theory, more and more researchers begin to pay attention to schema theory and practice the application of schema theory in English teaching, constantly explore the impact of schema theory on English teaching, and push English teaching practice to a new stage.

In the research, psycholinguists found that schema can affect understanding and interpretation of the presented information, and the activation of relevant schema can provide with the background knowledge of interpreting information. If there are no relevant schema or this schema cannot be activated, people will not be able to understand the given information and make corresponding judgments. Schema can also enable us to go beyond the given information and use the existing schema and given information to predict and infer unknown events. At the same time, schema can also apply the knowledge obtained by people in a situation to similar or completely different situations, so that people can make judgments. This provides a theoretical and practical basis for linguists and educators to further study the role of schema theory in language learning.

This enlightens us that in English reading teaching, the content of reading materials chosen by teachers should not be less popular, so as to avoid students' failure of understanding due to the lack of corresponding schema. The content should not be too familiar. If the content is too simple, which is of little significance to the improvement of students' reading ability. For the reading materials in teaching,

teachers should properly give students problem support in terms of cultural background before reading, so as to activate the relevant schemata in students' minds; In reading, teachers can also give students hints on the more implied meaning level, so as to promote them to connect with the existing schema as soon as possible. After reading, teachers can also discuss the answers and text, strengthen and improve the schemata established by students, and lay a solid foundation for similar text reading in the future.

Later, Anderson (1993) found that reading and listening included almost the same factors. Listening is also a process in which the three schemata interact. Listening is not only influenced by the listener's vocabulary, grammar and other language schemata, but also plays an important role in the listener's listening comprehension. This was also proved in Rubin (1994)'s experiment. This shows that before listening, teachers can effectively improve students' understanding ability by giving hints on the relevant background knowledge of listening materials. For students, they should pay attention to the expansion of their knowledge. The wider and richer the knowledge they gain, the more schemata in their brain. When they encounter different materials, the easier the schemata in their brain will be activated, so the higher the efficiency is.

To summarize, teachers should reorganize the curriculum structure, keep updating the teaching material, teach students according to their innate talent, actively implement heuristic and debate teaching, encourage students to reflect independently, enhance their learning initiative, and cultivate students' scholarly spirit and innovative consciousness in order to effectively apply schema theory to English teaching and learning.

2.6 Attitudes Towards English as a Foreign Language

2.6.1 The Relationship between Learning Attitude and English Achievement

Lambert and Gardner (1972)'s English learning motivation is divided into integrative motivation and instrumental motivation, and the impact on academic achievement is analyzed. In their research, intrusive learning motivation is considered to be effective and able to achieve good results in second foreign language learning. In short, it is a necessary condition for successful language learning. Learning motivation is not the only factor affecting learners. Many other factors are also key, and motivation and achievement affect each other. Good learning experience and achievements can stimulate better learning attitude. Similarly, according to Skehan (2008)'s research, successful learning experience of second foreign language can also maintain and create new learning motivation. A good cycle is formed: Motivation - achievement - higher motivation - better achievement. Motivation is the main influencing factor of learning, which directly affects the long-term learning process. In the reverse research, it is found that those who can effectively reduce harmful motivation and self-motivation are undoubtedly successful.

As for the relationship between learning attitude and academic achievement, scholar Gagne (2001) said in his research: "the satisfaction that learners get from academic achievement or learning progress itself may affect their attitude towards this linguistic ethnic group, and even change this attitude, which in turn will promote English learning".

Gardner (1972) puts forward that learning attitude, learning purpose, learning effort and desire to achieve the purpose constitute second language learning motivation. Brown (1994) classified learning attitude into learning motivation and put forward the theory of overall motivation and situational motivation. Ellis (1999) put forward the theory of task motivation to analyze the relationship between learning attitude and achievement.

Xia (2005)'s research on the relationship between English learning motivation and attitude and learning effectiveness investigates and analyzes the learning motivation and attitude of Non-English Majors in Zhejiang Vocational and technical college in the form of questionnaire. Combined with the final English score, this paper analyzes the correlation between English learning motivation, attitude and learning effectiveness.

The investigation report on English learning of higher vocational students by Lü, Ye, and Xie (2003) investigated and analyzed the learning attitude, analyzed the correlation between learning attitude and learning achievement, and came to the conclusion that there is a certain influence relationship between the two, that is, a positive learning attitude has a good promoting effect on learning achievement. Under the same other conditions, Students with good English learning attitude always achieve better results than those with poor English learning attitude. The negative learning attitude, naturally, its academic performance is also very poor, which cannot be compared with the performance of the former.

The above literature shows that previous studies either pay attention to the impact of students' English learning attitude on their academic performance, or pay

attention to the impact of English learning achievement on their English learning attitude. They are relatively independent and lack of correlation. Moreover, the research and empirical time is long, and most of the conclusions have been verified. At the same time, in the above research, there are still some deficiencies in the research content of learning attitude, which needs more research.

2.6.2 On How to Cultivate Students' Correct Learning Attitudes

Li and Zou (2007)'s investigation and Enlightenment on the learning attitude of College English learners in Independent Colleges believe that English teaching should correct the learning attitude from the aspects of English learning and future employment, personal ideal and future, and point out that English teaching should start from the emotional dimension of English learners' learning attitude, insist on never hurting students' self-esteem and make persistent efforts to stimulate students' self-confidence.

Sun (2006)'s research on College Students' learning attitude puts forward relevant countermeasures and measures for the problems existing in English learning attitude and the current situation of English learning, emphasizing that the formation of learning attitude is an arduous task. In addition to the unremitting efforts of the school, it also needs the cooperation and help of parents and society.

Liu (2002)'s research on motivation in foreign language teaching shows that non-English majors in higher vocational colleges have stronger surface motivation than deep motivation in English learning, and lack of self-confidence is common. English teachers should fully grasp and make use of the characteristics of students'

motivation, guide students to cultivate a sense of learning achievement and deep-seated interest in learning, guide students to transform surface motivation into deep motivation, and experience the fun of learning English; Teachers are supposed to Insist on taking students as the center, let them be the masters of learning, improve their participation in the classroom, and reduce students' classroom anxiety to a reasonable level as far as possible; Teachers should also mobilize students' enthusiasm, protect their self-esteem and enhance their self-confidence, so as to improve their sense of self-efficacy; Teachers should create a relaxed and harmonious learning atmosphere for students, fully reflect humanistic thoughts in teaching, sincerely care for and help students, so that they can learn in an active way.

In a word, in order to cultivate students' correct learning attitude, teaching should be student-centered, with encouraging education to stimulate students' interest in active learning, and to understand each student's learning motivation. When conditions permit, combine school education with family education and social education.

2.7 Related Learning Theory

2.7.1 Cognitive Learning Theory

2.7.1.1 The Basic Concept of Cognitive Learning Theory

Cognitive learning theory studies the internal process of individuals dealing with environmental stimuli, rather than explicit stimuli and responses. Influenced by different philosophical viewpoints, cognitive learning theory

is opposite to behaviorism learning theory. According to different time, research objects and research methods, cognitive learning theory is divided into early cognitive learning theory and modern cognitive learning theory.

Among them, the early cognitive learning theory refers to the learning "insight theory" of Gestalt psychology and Tolman's "cognition expectation theory"; Modern cognitive learning theories include Bruner's "cognition discovery theory", Ausubel's meaningful speech learning theory and Gagne's cognitive learning theory.

Cognitive learning theory holds that learning is a process in which an organism forms or reorganizes its cognitive structure through complex cognitive operations. On the basis of existing experience and internal motivation, it fully grasps the relationship and relationship of things in the situation, emphasizes the role of understanding, positive thinking, the structure of learning content and cognition, and pays attention to cultivating students' learning motivation and learning attitude.

2.7.1.2 The Main Idea of Cognitive Learning Theory

The main cognitive learning theory idea are as follows (Li, 2011):

Firstly, student centered. It highlights the student-centered teaching approach and emphasizes the need of allowing students to fully participate in the teaching process. Students are the primary source of knowledge and information processing, as well as the active builders of knowledge meaning, while teachers shift from knowledge instigators to knowledge helpers and guides.

Secondly, teaching in actual situations. Learners can employ relevant experience in their original cognitive structure to integrate and adapt to new knowledge obtained in the present environment, giving the new knowledge some meaning and encouraging students to actively develop their own knowledge.

Thirdly, collaborative learning. The learning of students is finished with the help of teaching groups. Teachers and students establish a teaching group under the direction and organization of teachers to critically examine diverse theories, views, and hypotheses together.

Fourthly, provide enough materials for kids to explore on their own. It is vital to supply sufficient information resources to learners in order to facilitate active exploration and meaning development. These media and tools, on the other hand, are employed to encourage students' autonomous learning and collaborative inquiry rather than teachers' explanation and demonstration.

2.7.2 Constructivism Learning Theory

2.7.2.1 The Basic Concept of Constructivism Learning Theory

Constructivism Learning Theory is based on pedagogy and is intended to help teachers improve their skills. The major goal is to understand how diverse activities in the development process activate students' autonomous learning, and how teachers may effectively play the role of supporter during the learning process.

Piaget, a Swiss psychologist, was the first proponent of constructivism leaning theory. In the realm of cognitive development, Piaget is regarded as one of the most prominent pedagogues and psychologists. Piaget's theory insists on beginning with materialist dialectics and investigating children's cognitive development from the perspective of the interaction between internal and external causes. "Children gradually construct knowledge of the external world through contact with the surrounding environment, allowing their own cognitive structure to grow," he argues.

The processes of "assimilation" and "adaptation" are at the heart of children's interactions with their surroundings. The absorption and integration of relevant information from the external environment into the child's existing cognitive structure (also known as "schema"), that is, the individual integrates the information provided by external stimuli into his own original cognition, is referred to as "assimilation." "Adaptation" refers to the process of rearrangement and transformation of a child's cognitive structure that occurs when the original cognitive structure, that is, the individual's cognitive structure, is unable to assimilate the information offered by the new environment. The change that occurs as a result of external stimulation.

Therefore, assimilation is the increase in the number of cognitive structures (schematic expansion), while adaptation is the change in the cognitive structure's nature (schematic changes). When a child can use existing schemata to assimilate new information, he is in a balanced cognitive state; however, when the existing schema cannot assimilate new information, the balance is destroyed, and the process of modifying or creating a new schema (ie, conforming) is a process of

finding a new balance. Children's cognitive structures are gradually built by assimilation and adaptation, and they are constantly enriched, refined, and evolved in the "balance-imbalance-new balance" cycle. This is Piaget's basic constructivism viewpoint.

On the basis of Piaget's above-mentioned theory, pedagogy and psychologists in various countries have further developed constructivism and greatly enriched the theory. The American developmental psychologist Kohlberg has made further research on the nature of cognitive structure and the developmental conditions of cognitive structure. Then, American psychologists Sternberg, Katz and others emphasized the key role of individual initiative in the process of constructing cognitive structure, and made serious explorations on how to exert individual initiative in the cognitive process. The "Cultural and Historical Development Theory" created by the former Soviet Union psychologist Vygotsky (1978) emphasizes the role of the social, cultural and historical background of the learner in the cognitive process. On this basis, researchers led by Vygotsky conduct in-depth research. The important role of "activity" and "social interaction" in the development of human advanced psychological function. All these studies have further enriched and perfected the constructivist learning theory, and created conditions for practical application in the teaching process (Zhang, 2014).

2.7.2.2 The Main Idea of Constructivism Learning Theory

Li (2011) summarized three basic viewpoints of constructivism learning theory from the views of knowledge, learning and teaching:

Firstly, knowledge view. Constructivism holds that knowledge is just an explanation and hypothesis of the objective universe, rather than a pure objective mirror of reality. It will continue to evolve and deepen as people's understanding grows, and new theories and explanations will emerge. The original information must be reprocessed and reconstructed according to the context of the unique situation while solving specific challenges. Furthermore, just because knowledge has taken on a new external shape and achieved more widespread recognition because of language does not mean that all learners share the same understanding of it. Because understanding knowledge necessitates individuals to construct based on their own knowledge and experience, as well as the learning process in a particular environment.

Secondly, learning view. Students develop their own knowledge through the process of learning. Students do not simply receive information; they actively construct knowledge's meaning. Learners actively pick, process, and handle external information depending on their own experiential background when they are learning. The creation of a personal meaning or understanding is based on the interpretation of incoming information. The knowledge and experience already stored in an individual's mind, the knowledge and experience mobilized, and the perception of the information received are all different.

Thirdly, teaching view. Teaching cannot ignore the learners' prior knowledge and experience, nor can it simply and obtrusively "load" them with outside knowledge. Instead, they should use the learners' prior knowledge and experience to help them in the acquisition of new knowledge. Take the initiative to create new knowledge and experience based on the original knowledge and

experience. Teaching isn't about passing on information; it's about digesting and converting it. Teachers and students, as well as students and students, must work together to investigate various issues, communicating and questioning each other along the process.

In short, each theory provides a theoretical basis for schema theory. In this study, each theory is more or less related to schema theory.

2.7.3 How do Each Theory Relate to Schema Theory

The so-called schema theory refers to the theory based on the representation and storage of knowledge organized around a topic. Schema theory revolves around the key point schema (Kang, 2011). According to the general understanding of Western philosophers, schema is a conceptual network and propositional network used to organize, describe and explain our experience. Cognitive psychologists believe that in the process of cognition, people abstract and summarize the information of the basic structure of the same kind of object or activity, and the block diagram formed in the brain is the schema; Piaget, Rumelhart believe that schema is composed of several variables representing conceptual elements, which is a knowledge framework and classification system; Linguist Carroll regards schema as a structure of semantic memory. Although different disciplines have different ideas of schema, there's a consensus that schema is a structure (Kang, 2011).

Learners store and arrange varied data through cognitive processes to produce a knowledge structure, according to cognitive experts. The concept of "cognitive schema," coined by Swiss researcher Piaget, is central to cognitive

development theory. He believes that development is a continual interaction between humans and their environment, and that its underlying psychological structure is always changing, and that the so-called schema is the cognitive framework formed by people in order to cope with a certain scenario.

Constructivism is a cognitive psychology sub-discipline. The idea of schema, which refers to how people perceive, comprehend, and think about the world, is a key constructivism term. It can also be thought of as the structure or framework of psychological activities. The starting point and heart of cognitive structure, or the foundation for human understanding, is schema. As a result, schema formation and modification are central to cognitive growth, which is influenced by three processes: assimilation, adaptation, and balancing.

Therefore, schema theory is closely related to cognitive theory and constructivist learning theory. In the process of active learning construction of cognitive learning theory and constructionism learning theory, learners need to build their own knowledge system and knowledge structure, which is schema.

Although schema participates in the construction of these two theories, it's different from these two theories. These two theories are learning theories, which study how to better stimulate students' learning enthusiasm and improve their academic performance, while schema theory is a branch of cognitive science concerned with how the brain structures knowledge. The 2.1 table below illustrates the relationship and differences between the two theories.

Table 2.1 Relationship and Difference between Two Theories

Relationship and Difference between Cognitive Learning Theory and Constructivism Learning Theory			
		Cognitive Learning Theory	Constructivism Learning Theory
Difference	Knowledge View	Knowledge is dynamic, subjective and relative	Knowledge is absolute, objective and truth
	Learning View	Through learning community, students actively construct knowledge system in certain settings and have a different interpretation of knowledge.	Students actively form cognitive structure through the three processes of acquisition, transformation and evaluation.
	Teaching View	Teaching is to activate students' original relevant knowledge and experience, promote the growth of knowledge and experience, and promote students' knowledge construction activities, so as to realize the reorganization, transformation and transformation of knowledge and experience.	The purpose of teaching is to understand the basic structure of the subject. The basic structure of the subject is the center of teaching. The ultimate goal of teaching is to promote students' general understanding of the subject structure.
	Teachers' Role	Helper, collaborator	Guider, authority
Relationship	They are all branches of cognitive psychology; Both emphasize the initiative of learning, and students should build their own knowledge system; Both emphasize the interaction between old and new experiences.		

Source: Zhang & Chen, 1996

2.8 Related Research and Studies

Schema theory was first put forward by Kant (1781) and then was widely used in psychological research since 1930s. It is not until 1960s that schema theory is applied to language teaching. Rumelhart (1980), and Carrell (1983) and Eisterhold (1983) introduced schema theory into reading comprehension and they present that reading comprehension processing is an interaction between input information and related prior knowledge.

Both reading and listening belong to the process of information input. During this process, learners need activate their background knowledge storing in their mind as quickly as possible after receiving input information, and then they decode and reconstruct meaning. Based on the similarities between listening and reading comprehension, many linguists begin to search the relationship between schema theory and listening comprehension and apply this theory into listening teaching. So, many tests are designed to clarify the connection between listening comprehension and background knowledge. Brown and Yule (1983) emphasized that a successful language learner should combine linguistic knowledge with non-linguistic knowledge to have a better understanding of the listening information. Bacon (1992) verifies the effect of background information on the process of listening comprehension. The researcher found that topic familiarity, language level and question type influence the effectiveness of listening comprehension. Higher-level listeners decode information based on their prior knowledge, but lower-level listeners may be misguided by the insufficient background knowledge. Hansen and Jensen (1994) provide different outcomes. They insist that background knowledge of vocabulary, phonetics and grammar doesn't have effect on listening comprehension, but cultural knowledge

really works because the research subjects come from different countries. In Vandergrift's study (1998), one of the listening strategies that a group of French students tend to use to learn English is interacting prior knowledge with listening materials. Nunan (1999) in his book *Second Language Teaching and Learning* transfers reading comprehension mode based on schema theory into listening mode. He provides three listening processing mode: bottom-up mode, top-down mode and interactive mode. Dobson (2001) clarifies detailed territory of background knowledge. Prior knowledge can be categorized into linguistic knowledge and non-linguistic knowledge. Language intuition, listening strategy, familiarity of the topic, general knowledge of the world also plays an important role in listening comprehension besides vocabulary, phrases and grammatical structures.

The study of schema theory in China starts relatively late compared with other countries in the world. Not until 1980s did the study of schema appear in China. Many studies are conducted by English teachers whose purpose is to facilitate students' second language acquisition.

An experiment was conducted by Liu (1996) to test the functions of schema theory. The result shows background knowledge plays an important role in listening comprehension. In Huang's research (1998), he testifies the influence of background knowledge in listening comprehension from specific aspects, including familiarity of topic, proficiency of language and types of questions. Fu (2001) presents a study about the influence of schema theory on listening comprehension from the perspective of psychology. Schema-theory-based teaching mode can arouse students' interest and reduce the fear and anxious of listening text. Based on English Curriculum Standards, Zhou (2002) applies schema theory in the process of listening teaching. Pre-listening

stage is a key stage, where teachers help students activate prior background knowledge. In while-listening stage, the awareness of using listening strategy should be motivated. In post-listening stage, teachers should combine speaking, reading and writing to consolidate what they have learned. Shan (2013) directs research in adult junior college to testify the efficiency of schema theory in listening comprehension by using action research. She states sufficient prior knowledge can relieve tension and anxiety and reduce pressure before listening test.

From the studies above, it is obvious that schema theory has been widely used in reading; however, the study of application of schema theory into listening has a practical research value as well. Although a lot of research and studies show the feasibility of the application of schema theory in listening teaching, the importance of listening comprehension in daily communication and analytical practice has not been realized and lacks of practice. Therefore, the purpose of this study is to examine the effectiveness of schema theory on English listening skill and attitude towards it through the case study.

CHAPTER 3

RESEARCH METHODOLOGY

Chapter three described the methods undertaken to answer the following research questions: Would English listening skill of vocational high school students in Zhejiang province become higher after the application of schema theory? And what kind of attitude would those vocational high school students have towards the application of schema theory in English listening lessons? The detailed description is presented as the following order:

- 3.1 Research Design
- 3.2 Target Group of the Study
- 3.3 Research Instrument
- 3.4 Validity and Reliability of Research Instruments
- 3.5 Data Collection Procedure
- 3.6 Data Analysis

3.1 Research Design

Research methodology is a technique or specific procedure being applied in selection, processing, identification, and information analysis about a topic (Stoothoff, 2019). Now available research designs usually include qualitative methods, quantitative methods, and mixed methods. In general, quantitative research mainly focuses on and answers questions about the whole, relatively macro, relatively

universal and focusing on objective facts, especially the relationship between variables; And the qualitative research mainly focuses on and answers the individual, relatively micro, relatively special and subjective questions, especially the interactive questions in specific situations (Feng, 2017).

In this thesis, a case study was used as a research approach, which comprised gathering quantitative and qualitative data and combining the two types of data. The hybrid approach's core premise is to gain a more comprehensive understanding of the research problem (Creswell, 2014).

This paper adopted a case study to better analyze the collected data in details. Specifically, quantitative data included pretest and post-test, and qualitative data included semi-structured interview. Figure 3.1 shows the details of the research design about this study.

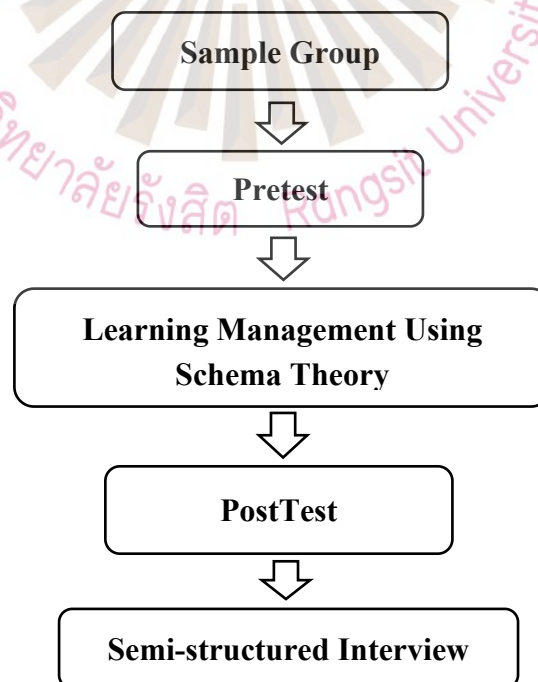


Figure 3.1 Illustration of Research Design

3.2 Target Group of the Study

Purposive sampling was used to pick four grade 10 Chinese students from a vocational high school in Zhejiang province for the study: two men and two females. These students ranged in age from 15 to 16 with mixed genders and varying levels of English proficiency and had varying levels of English proficiency. As EFL students, they have mastered basic listening, speaking, reading, and writing skills after studying English for more than three years as part of the Chinese compulsory curriculum.

3.3 Research Instruments

A research instrument is a tool that collects, measures, and analyzes data on a certain topic (Lee, 2018). The information comes from the research subjects and is focused on the subject. To obtain more effective data, this study included a listening accomplishment exam (containing a pretest and a posttest) and a semi-structured interview. The details of the research instruments are shown in table 3.1, which is based on the study's research objectives.

Table 3.1 Instruments Used for Each Hypothesis

No.	Research Hypothesis	Research Instruments
1.	Vocational high school students' English listening skills will be improved after applying schema theory.	Listening skill achievement tests (pre-test and post-test)
2.	Vocational high school students will have positive attitude towards the application of schema theory in English listening lessons.	Semi-structured interview

3.3.1 Lesson Plans

The researcher devised four lesson plans, each lasting 40 minutes, for a total of 320 minutes (1 Lesson Plan = 2 Sessions). Over the course of four weeks, the researcher taught eight sessions (2 sessions per week). The study's topics were chosen depending on the sample students' English proficiency.

These lesson plans were aimed at teaching grade 10 Chinese vocational high school students short stories 1) “A Child’s Angel” 2) “So Much to Learn”; 3) “The Time Account” and 4) “Hints for Those That Would Be Rich” from China's famous English learning website. The major goal of the courses was to see if using schema theory could help research participants understand the content while listening.

Teachers first directed students to clarify the logical structure of the article, provided them with a structural framework, and ensured that they had a general understanding of the text content when the major body of listening materials was evident. The teacher then focused on asking questions regarding the main body of the article in order to ensure that the pupils understood the events in the listening materials. Students were asked questions in order to not only understand the text material, but also to establish topic-related knowledge content in their minds so that they could extract important information when they encountered similar topics in the future. Finally, teachers sublimated the theme to make it more meaningful by having students think in the positions of others, increasing students' approaches and procedures for problem solving, and quietly deepening students' schema.

3.3.2 Quantitative Instrument

The researcher used achievement tests as the primary tool in this research. The test were divided into pretest and posttest sections with the same number of questions and difficulty level to assess students' English listening skills, including comprehension and analytic skill. Each test consisted of 20 questions, with one point granted for each correct answer. This test's scope covered four instructional materials from the lesson plans, such as vocabulary, phrases, sentence patterns, and so on.

3.3.3 Qualitative Instrument

Instead of just a question-and-answer approach, a semi-structured interview allows the interviewer to ask more open-ended questions and allow for discussions with interviewees rather than strictly following a formal list of questions (Doyle, 2017).

A semi-structured interview was employed in this study to acquire qualitative data about students' attitudes. The researchers conducted an interview with each of four grade 10 students, asking them eight questions about vocational high school students' interest and motivation in English listening skill teaching and learning based on schema theory, students' engagement in this course, and how these students perceive the efficacy of schema theory on English listening skill learning.

3.4 Validity and Reliability of Research Instruments

A semi-structured interview allows the interviewer to ask more questions. The

ideas of reliability and validity were initially derived from measurement, according to Li (2009). The term "reliability" in measurement refers to "the stability and reliability of test scores, that is, the degree of consistency of multiple tests." The amount to which the "scale" can genuinely measure the traits or functions to be measured, that is, the degree of consistency between the measured results and the aims to be reached, is referred to as validity. It is widely assumed that educational research validity relates to the dependability or certainty of educational research conclusions. It can be observed that the definition of educational research validity differs from that of measurement validity. The former refers to the research conclusion's dependability, while the latter alludes to the measurement results' usefulness. As a result, we cannot simply apply the classification standard of measurement to classify the validity of educational research, and the elements impacting measurement validity may not be the same as the factors affecting educational research validity. In educational research, the study's validity and reliability must be good. As a result, it was critical to ensure the study's validity. For the sake of discussion, this thesis adhered to the broad consensus of the academic community and employed the concept of validity to assess the research's reliability, that is, "if the research results represent the actual situation of the research object."

3.4.1 Content Validity

This thesis introduced the concept of IOC in order to better evaluate the effectiveness of research instruments. The Rovinelli and Hambleton (1977) index of item-objective congruence is a tool used in test preparation to evaluate content validity during the item development stage. This measure can only be used to evaluate unidimensional items or items that measure specific skill composites. The

Item-Objective Congruence (IOC) score, which ranged from -1 to +1, was used to evaluate the study instruments' items.

+1 Congruent: means the item meets specific objectives.

0 Questionable: means not sure if the project meets the specific objectives.

-1 Incongruent: means the project does not meet the specific objectives.

It is worth noting that in IOC evaluation, if the value of the test item equals or exceeds 0.67, the research instruments are legitimate. If the test value is less than 0.67, it indicates that the study instruments should be adjusted.

The research instruments (achievement assessments with pretest and posttest, and semi-structured interview questions) in this study were assessed by three experts, all of whom were experienced English language teachers in Thailand and China. The validity test result for all instruments was +1, which was greater than 0.67, indicating that all instruments were acceptable for future data collection.

All research instruments in this study were validated by three specialists in English language teaching and education from China and Thailand. All instruments passed the validity test with a score of +1.

3.4.2 Reliability Test

Reliability refers to the consistency and stability of research tools, as well as their predictability and correctness. The α score ranges from 0 to 1, with the closer the number is to 1, the more trustworthy the test. In general, a score of more than 0.7

is regarded acceptable (Stephanie, 2016).

The Kuder-Richardson Formula 20 (KR-20) was employed in this study to assess the reliability of achievement exams. Other 30 grade 10 students were invited to take the test in order to ensure the reliability of the tests, and their results were collected and later calculated for the reliability of the tests. The accomplishment tests' reliability test result was 0.89, indicating a high degree of acceptance.

Cronbach's Alpha was used in this study to measure dependability; the internal consistency is indicated below:

Table 3.2 Cronbach's Alpha Rule of Thumb

Cronbach's Alpha Rule of Thumb	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

All achievement tests were given to 30 students who did not belong to a sample group. Cronbach's Alpha was then used to compute their replies. The reliability test of the questionnaire items yielded a result of 0.89, which was statistically acceptable.

3.5 Data Collection Procedures

3.5.1 Ethical Approval

To begin the investigation at a vocational high school in Zhejiang province, the researcher obtained permission from the school's principal. The researcher also addressed a letter to the parents of the participants in the study to explain the situation and gain their agreement.

3.5.2 Confidentiality

The researcher kept the sample group's personal information, family situation, test papers, and semi-structured interview records private. In other words, throughout the study, all information was treated with confidentiality.

3.6 Data Analysis

The acquired data was analyzed in two ways: quantitatively and qualitatively, in order to assess the efficacy of this schema-based English listening skills teaching. The quantitative analysis was primarily based on pre-test and post-test results; the qualitative analysis was primarily based on semi-structured interviews with students to assess their attitudes on the use of schema theory in English-listening classes.

3.6.1 Quantitative Data Analysis

Through the pretest and posttest, students' scores were assessed by calculating

the mean score, total score, and standard deviation.

3.6.2 Semi-structured Interview

The purpose of the semi-structured interview was to learn about the students' attitudes regarding employing schema theory in English listening skills. The intention consisted of eight questions divided into three categories:

Part A: Interest and motivation

Part B: Engagement

Part C: Efficacy of schema theory on student' English listening skill learning.

The responses from the semi-structured interviews were recorded with the approval of the sample group to ensure the data's reliability and validity. The recorded content was transcribed into text for the study's analysis.



CHAPTER 4

RESULTS AND DATA ANALYSIS

This thesis design was to investigate the use of schema theory to compare the English listening skill of grade 10 Chinese vocational high school students as well as the students' attitude towards the use of schema theory in English listening courses. The research findings were derived from the achievement test (pretest and posttest) as well as a semi-structured interview. The impact of schema theory was determined using comparative analysis and thematic analysis approaches. The following is the sequence in which the data findings are given in this chapter:

4.1 Quantitative Data Analysis

4.2 Qualitative Data Analysis

4.1 Quantitative Data Analysis

This chapter identifies the findings for the research question of applying schema theory to improve Chinese grade 10 vocational high school students' English listening skill. The results were collected from a pretest administered prior to the schema theory teaching intervention and a posttest administered after the intervention was completed. The students were required to complete the pretest and posttest with the same set of questions, which focused on two main themes: comprehension skill and analytical skills. These were the two most important aspects of learners' listening skill that were assessed.

Three experts in the field of English instruction, including a researcher and two experienced English teachers, were invited to rule out any bias. A comparative statistical analysis was performed utilizing the sample group accomplishment test to compare the pretest and posttest outcomes of the sample group. The comparison was performed utilizing mean, standard deviation, and inferential statistics at a significance level of $p < 0.5$.

4.1.1 Analysis of Sample Group Achievement Test

The use of sample group statistics to analyze test scores resulted in a good result, as indicated in Table 4.1 below. The pretest mean score was 7.50 with a standard deviation of 4.596 and the posttest mean score was 13.50 with the standard deviation was 8.839, resulting in a mean difference of 6 points. The significant value (P) obtained was 0.000, which was lower than 0.05 ($P < 0.05$); the T-test value was 3.416, indicating a statistically significant increase in the posttest scores compared to the pretest scores. The statistical comparison of pretest and posttest means is shown in Table 4.1.

Table 4.1 Sample Group Achievement Test

Sample Group Statistics						
		Mean	N	Std. Deviation	t	Sig.
Pair1	pretest	7.50	4	1.732	3.416	.000
	posttest	13.50	4	2.081		.000

4.1.2 Comparison of Pretest and Posttest Scores of the Sample Group

Table 4.2 shows the pretest and posttest results for the sample group. The overall score for the pretest and posttest was 20 points. Student G-S01 received the highest score of 10 out of 20 on the pretest, while student G-S04 received the lowest score of 6 out of 20. It was discovered by reviewing the posttest scores that all pupils' scores improved. Student G-S01 received the greatest score (16 out of 20), while student G-S04 received the lowest score (11 out of 20 points). Student G-S03, on the other hand, improved the most, gaining 7 points on the posttest.

Table 4.2 Pretest & Posttest Scores of the Sample Group

Student ID	Pretest Scores (Full Score=20)	Posttest Scores (Full Score=20)	Increase in test Scores	% Difference
G-S01	10	16	6	60%
G-S02	7	13	6	85.7%
G-S03	7	14	7	100%
G-S04	6	11	5	83.3%

When the raw pretest and posttest scores of the students were compared, it was evident that the posttest scores were greater than the pretest scores. In brief, after the intervention with schema theory in the English listening course, all students showed an improvement in their results.

4.1.3 Pretest-Posttest Comparison

Figure 4.1 indicates the results of the pretest and posttest for individual

students. The blue areas are the results of the pretest, while the orange parts are the results of the posttest. As a result, all of the participants' posttest scores improved, demonstrating that the use of schema theory helped them enhance their English-listening skills.

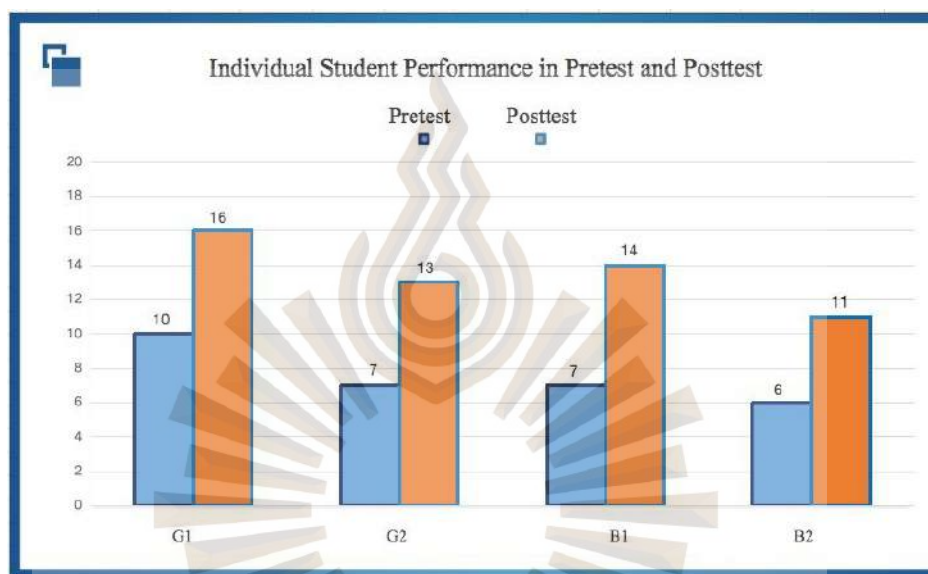


Figure 4.1 Graphical Representation of Students' Pretest & Posttest Scores

Figure 4.2 additionally displays the pretest and posttest mean scores, which are 7.5 and 13.50, respectively. The posttest mean score for the sample group was greater than the pretest mean score. When compared to the score on the left bar, which represents the pretest mean score, the right bar reflects the posttest mean score, which showed a substantial rise of 6 points. As a result, it's reasonable to conclude that each individual improved in terms of posttest outcomes.

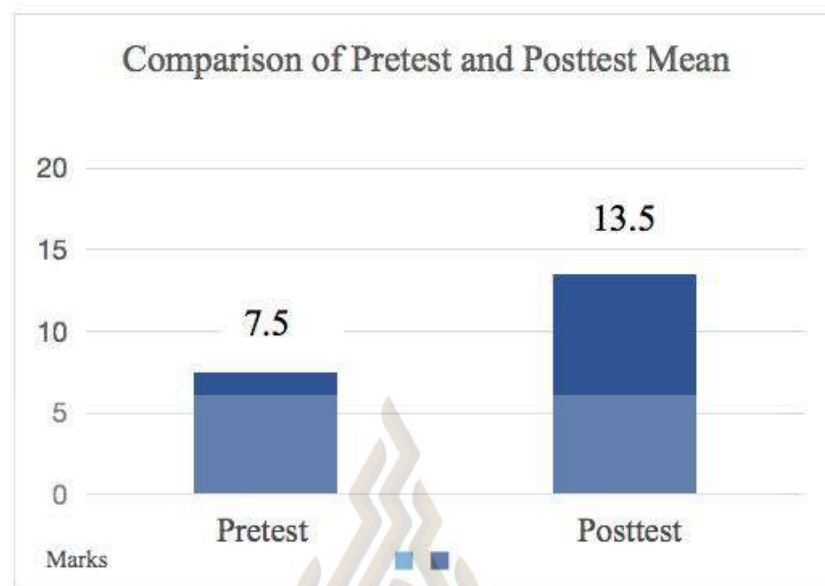


Figure 4.2 Comparison of Pretest & Posttest Mean

4.2 Qualitative Data Analysis

The results of the semi-structured interview that was used to assess the students' attitudes are presented in this section. A technique known as theme analysis was used to analyze the data. The researcher decided to employ a semi-structured interview to obtain in-depth views and opinions from the student participants because the semi-structured interview provided the benefits of both an unstructured and a structured interview.

Respondents were allowed to express their opinions and ask questions to the interviewer during the interview, which encouraged them to offer more important data to the qualitative study, such as their perspectives on controversial topics. They were also able to communicate their views more clearly during the interview. Furthermore, the semi-structured interview's organized component provided the interviewer with

reliable, comparable qualitative data.

After the class, four grade 10 students (2 males and two females) were interviewed, with each session consisting of eight questions. To protect the study participants' privacy and confidentiality, G1, G2, B1, B2 were used to symbolize their ids. Thematic analysis was used to examine the qualitative data from each participant's interview. The responses of the pupils were audio-recorded and then translated into English for additional study.

As a consequence, after learning English listening skills using schema theory, all four students in the case study participated in the semi-structured interview. Part A: Interest and motivation, Part B: Engagement, and Part C: Efficacy of schema theory on student English listening skill learning were the three parts of the interview. Each category's responses are listed below.

4.2.1 Interest and Motivation

Students' semi-structured interview replies indicated that they were enthusiastic about using schema theory in English listening sessions. The majority of participants thought the listening activities were interesting and entertaining, and the teaching example was fascinating and instructive. They also mentioned that the variety of activities in each 40-minute course kept them fully interested. Several participants also claimed that integrating schema theory to teachings made them more understandable. Others pointed out that listening to a variety of speakers could expose kids to the various English dialects spoken around the world. Some of the viewpoints shared by respondents are as follows:

Question 1: Did you like learning English? How?

The majority of the participants loved learning English. The following two aspects were among the reasons: For starters, they worked in huge international trade companies, therefore English was most likely employed in their everyday and future lives. Second, learning English was a simple and enjoyable process, as opposed to being tedious. Here are some quotes from the participants to back up their claims:

G1: “I study international trade in school. For this major, learning English-related knowledge is very important. I am willing to choose this major because I am interested in English.”

G2: “I like learning English, but I find it difficult to recite words. It takes me a long time to remember the words of a unit, and I often forget all these words after a holiday.”

B1: “I think English class is very interesting, because there will be a lot of small stories when learning English, and understanding an article will have the same sense of achievement as making a math problem.”

B2: “I can only say that English class is not boring. I can persist in listening to a class.”

Question 2: Did you find the learning process of this English course interesting?

The majority of respondents found studying English to be interesting primarily for the following two reasons: For starters, most students were eager to participate in in-class activities and appreciate the feeling of competitiveness and competition. Second, by incorporating schema into the teaching process, the learning difficulty was reduced and the material was easier to comprehend. The inclusion of films and graphics to the classroom enhanced the learning environment. Here are some quotes

from the participants to back up their claims:

G1: “I don't think such teaching is boring, because, in class, I don't just learn grammar, but learn English in stories, which makes people enjoy it.”

G2: “I can accept this learning method of learning words before class because it is the same in school. I am used to it, so I can adapt to this online class, which is very interesting. As for the learning difficulty, the listening speed is too fast. I need time to adapt to this speed.”

B1: “I like these small classroom activities, just like playing games in class. If I can answer a difficult question, I will have a sense of achievement.”

B2: “I like watching an English movie in English class, so English class will become interesting.”

4.2.2 Engagement

Almost every student in the study agreed that learning schema theory was beneficial. Participants were fully interested in the classes owing to the pre-listening, while-listening, and post-listening assignments. The researcher also planned and carried out all of the activities in a systematic manner, which resulted in enhanced pupil participation. The participants were initially perplexed when listening to the class listening material, but the schema eventually helped them listen to English. The majority of children believed the listening exercises were simple and enjoyable. Repeated listening activities, according to numerous participants, helped them gain confidence in their abilities to listen to and comprehend English. The following are some of the participants' points of view:

Question3: Did you like to participate in class activities? Why?

It was found that most interviewees expressed their favor to participate in class activities, mainly for two reasons: 1. Classroom activities helped improve their English skills including listening, speaking, and reading; and 2. It enhanced their interest in learning. Here were some of the participants' statements to confirm their ideas:

G1: “In fact, I don't like to participate in classroom activities, but I feel more open when I go to class online, and all the students in this small class are my friends. Even if I don't do well, I don't have a great psychological burden. Therefore, in this study, I will still actively participate in classroom activities.”

G2: “I like to participate in these activities, it gives me chance to test and improve my English abilities, but sometimes I don't know how to express it in English, so I hesitate.”

B1: “It depends on whether these class activities are interesting or not. If it is interesting, I'm glad to take part in.”

B2: “I don't like taking part in these class activities. I'd better not call my name, or I'll be nervous.”

Question4: To what extent can you accept the listening method of establishing schema before listening?

It was discovered that after they were explained what schema theory was, they were quick to embrace it. Before playing the listening materials, all respondents hoped the teacher would assist them in establishing schema, which would help them gain confidence before listening to the information. Furthermore, it revealed that the development of schemata reduced the difficulty of listening.

G1: “I like the teacher explaining relevant background knowledge

to us before listening because I have no confidence in my listening ability all the time. With the background knowledge, I am more confident to have a better understanding of listening materials in the process of listening.”

G2: “I hope the teacher will popularize relevant knowledge for us in each class so that I can understand the meaning of the article half listening and half guessing.”

B1: “I can basically accept it because it allows me to have a general understanding of the content of this class before class. Then, learning the new words before listening will help me understand the listening content more easily when I practice listening.”

B2: “The difficulty is reduced. No one will not like it.”

4.2.3 Efficacy of Schema Theory on Student’ English Listening Skill Learning

With the exception of a few, almost all of the students thought that applying schema theory to their learning was advantageous. They explained that doing so on a daily basis can help them improve their general language skills, such as grammar, vocabulary, and pronunciation. Some students agreed that using schema theory on a daily basis could help them broaden their thinking and establish good learning habits. Other participants said they felt moved or driven to act as the speakers in the materials when they saw the listening materials. The following are some of the participants' points of view for your confirmation:

Question5: How did you feel about using schema theory to understand listening material?

It was found that all the respondents' feelings included the following two aspects:

1) Being conducive – This was supported by the students' responses below.

G1: “I also like this method of learning English systematically. While learning the relevant knowledge encountered in the listening materials, I also learned a lot of knowledge other than listening, which is very conducive to the accumulation of my daily English knowledge.”

G2: “My vocabulary has expanded, although I find it difficult to recite words. But when teachers speak words, they will use word roots to help us understand and remember words. I think learning English is suddenly a bit like learning Chinese.”

2) Being easy – This aspect was in line with the students' responses as follows.

B1: “Although I think listening is still very difficult, this method can make listening a little easier.”

B2: “Listening is a little easier, but it's only a little.”

Question6: How did schema theory make it easy to understand listening material?

All of the students agreed that applying schema theory to understand auditory content made it easier to understand. Students will predict the theme and rapidly absorb the linked terms in the listening materials since they developed schema before listening. As a result, students used schema to understand the listening content, and this process also helped students better understand and improve listening skills. Here are some quotes from the participants to back up their claims:

G1: “I was told the meaning and usage of some words and phrases before listening to the material, which makes it easier for me to understand this part of the content in the process of listening. In addition, before listening to the materials, I will also associate according to the known materials, and associate what the theme of the listening materials may be. Therefore, I think it is easier for me to understand the listening materials.”

G2: “Before listening, the teacher explained the important and difficult words of listening. Although the meaning of the word needs to be reflected for a while in the process of listening, the difficulty of listening is still reduced.”

B1: “I have already answered the question in Question 4.”

B2: “I don't know how to say it. Of course, it will be easier after the teacher has taught it.”

Question7: Have you improved your listening skills after these courses? How?

Most students believed that their ability to listen to English materials had only improved slightly because they had only improved their ability to establish schema prior to the learning process in class, and they still had to memorize English vocabulary and phrases one by one; in other words, putting the schema into practice took a long time. Furthermore, few students believed that their listening skills had significantly improved. Here are some quotes from the participants to back up their claims:

G1: “For more than a month, the teacher taught us that if we encounter words we haven't learned in the process of listening, we don't have to be too nervous. We can guess the meaning of the word appropriately according to the root and context. If I heard a word I didn't know before, I would be particularly anxious and tangled on the word for a long time, which affected the attention of the

next content. Therefore, I think my skills in guessing the meaning of the word have been improved.”

G2: “I don't know whether my listening skills have improved or not. Maybe, but maybe only a little. After all, we only had a few classes. Before listening, the teacher helped us broaden our vocabulary, but I can only confirm that the listening content of our class has become simple.”

B1: “Through the study of this course, I know what to do before, during, and after listening. We should remove the obstacles of new words before listening, grasp the key information when listening, and comb the listening text again after listening, which can provide some learning ideas for self-study in the future.”

B2: “During class, I can follow the teacher's ideas to basically complete listening practice, but there are still some difficulties in autonomous learning after class.”

Question8: Did you like to continue understanding English listening materials using schema theory? Why?

The majority of the students (3 students) said they would continue to use schema theory to grasp hearing materials since it made them simple and easy to understand. Only one student refused to use schema theory to continue understanding the topics because he believed his knowledge base was insufficient to create schema. The load of memory was also enhanced as a result of learning schema theory. Here are some quotes from the participants to back up their claims:

G1: “This kind of learning can help me classify vocabulary and help me remember by association.”

G2: “This teaching mode can not only help me expand relevant new vocabulary, but also achieve the effect of regular review. Therefore, I will also

use this method in self-study in the future.”

B1: “I’d like to continue understanding English listening materials using schema theory. If I take notes in this way, I can remember more clearly and faster, and I won’t find it boring to remember words.”

B2: “I don’t like to remember words. I can’t remember too many words, so I’d better not.”



CHAPTER 5

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

This chapter contains the study's summary, and the information is given in the following order:

5.1 Conclusion

5.2 Discussion

5.3 Recommendations

5.1 Conclusion

The two objectives stated for this study were to improve English listening skill of vocational high school students in Zhejiang province through the application of schema theory and explore vocational high school students' attitude towards the application of schema theory in English listening lessons.

As stated in the previous chapters, the achievement tests and semi-structured interview were administered in this study. These were carried out in a case study by applying both quantitative and qualitative approaches in one vocational high school in Zhejiang province. The conclusion of findings can be stated as follows.

5.1.1 The Result of Pretest and Posttest Data Analysis

The initial goal of the study was to apply schema theory to assist vocational high school students in improving their English listening skills. The difference in learning achievements between the sample group was then compared using the pretest and posttest data. The achievement test results are listed below.

1) The sample group achievement test statistics revealed that the posttest mean score (13.50) was 6.50 higher than the pretest mean score (7.50). The standard deviations for the pretest and posttest for the sample group were 0.337 and 0.194, respectively. As a result, the higher mean score of the posttest demonstrated that schema theory improved students' English-listening skills.

2) The highest and lowest students scored 10 and 6 out of 20 points on the pretest, respectively. The pupils' greatest and lowest marks on the posttest were 16 and 11 out of a possible 20 points, respectively. In the posttest, however, all students in a sample group had greater results. This helped confirmed the research objective 1 in that the vocational high school students in Zhejiang province improved their English listening skill through the application of schema theory.

3) Only one person received a score of higher than 10 out of 20 on the pretest. All four students in the sample group scored greater than 10 out of a possible 20 on the posttest.

4) All of the individuals increased their scores on the posttest. Among the four participants, Student No. B1 improved the most by 7 points in the

posttest compared to the pretest.

The results of the quantitative data analysis clearly indicated that students' posttest results had improved dramatically. As a result of the findings, schema theory was found to be an effective method for developing English listening skills among vocational high school students in China's Zhejiang province.

5.1.2 Students' Attitude Analysis

The study's second objective was to identify how vocational high school students felt about using schema theory in English listening classes. To obtain relevant qualitative data, each student in this case study was interviewed in a semi-structured interview. The results of the recorded, transcribed, interpreted, and analyzed interview responses were obtained using thematic analysis. The students had a good attitude toward adopting schema theory to improve their English-listening skills, according to the data. All of the students reported that they enjoyed all of the schema theory-based classes. This was evident in their responses during the achievement tests and the semi-structured interview. This is essential to conclude up the analysis of the students' responses.

1) The majority of students thought schema theory helped them study more efficiently because it encouraged them to form beneficial learning habits in their everyday life. They also noted that utilizing schema on a regular basis helped them enhance their language skills, especially their vocabulary and grammar. Additionally, some of them reported that the schema assisted them in better understanding the listening materials while also enhancing their listening skills.

Schema theory was recommended by a few people as a way to assist them produce and organize ideas for anticipating themes and details.

2) Students were motivated and enthusiastic about using schema theory to help them study more efficiently in the future after getting good performance results on the posttest. In addition, some students hoped that more teachers would adopt the schema theory since it made learning more engaging and enjoyable.

5.2 Discussion

As previously noted, the study generated two main conclusions. The first finding revealed that students in vocational high schools improved their English listening skills by adopting schema theory. The second finding was that students at vocational high schools will be enthusiastic about adopting schema theory in English listening sessions. The following section will summarize the findings and explain how they addressed the study's research questions.

5.2.1 Students' Listening Achievement

All four students increased their posttest results when compared to their pretest scores, according to the findings. Improvement scores varied from 5 to 7, with 5 representing the lowest and 7 representing the most. Furthermore, the pretest and posttest mean scores were 7.50 and 13.50, respectively, with a 6 point difference, indicating that the pretest and posttest scores differed significantly. Because the significance value (p-values) was 0.000 ($p < 0.01$), it was statistically significant. As a

result, students' English-listening skills improved once schema theory was implemented. Simply put, a statistically significant improvement in their achievement ratings confirmed it. As a result, all of the findings listed above provided a reliable answer to the first research question.

Furthermore, the study's findings were comparable to those of Zhou (2002), who discovered that using schema theory considerably enhanced students' listening skills. They also discovered that using "schema theory," English listening instruction can fully mobilize students' subjective initiative and interest in listening materials, as well as conduct positive and effective learning thinking, as well as transfer listening teaching from "words and sentences" to "discourse." As a result, they came to the conclusion that schema theory improved students' listening skill.

5.2.2 Students' Attitude

The semi-structured interview was used as the research instrument in this study for the second objective. Students had a positive attitude and were eager to use schema theory to improve their English listening skills, according to the data. This was consistent with studies by Abraugh (2000) and Harvey, Locke, and Morey (2002), which found that students enjoyed participating in curriculum design activities, which resulted in increased learning satisfaction.

Following the study, semi-structured interviews were conducted to gather information about the students' learning attitudes. The discussion was sparked by eight questions. The participants expressed their views and ideas during the interview. According to the responses from the participants, schema theory training improved

students' English listening skills in terms of areas of interest and motivation, engagement, and efficacy.

The second conclusion revealed that grade 10 vocational high school students in Zhejiang province had a favorable learning attitude after learning English listening skills using schema theory. The researchers discovered that teaching students about schema theory enhanced their interest in English listening skills and decreased the stereotype that English listening skills are difficult to learn.

Teachers were also shown to be able to improve their teaching skills over time, according to the study. Teachers should emphasize the value of using schema knowledge in listening lessons, such as boosting students' awareness of forming new schemata in their minds and assisting students in activating old knowledge. Students can listen freely rather than uncomfortably by activating existing schemata in the mind, allowing them to actively participate in the listening lesson.

Improve the interest and challenge of listening class while enhancing their listening comprehension abilities. Students' excitement and engagement in learning can be increased by using schema theory to organize some entertaining classroom activities, enliven the classroom atmosphere, and increase student enthusiasm and engagement in learning. This would assist students absorb classroom learning materials more effectively and develop a positive attitude toward learning.

5.3 Recommendations

The study's findings have shown that applying schema theory improved

students' English listening skills and had a favorable impact on students' attitudes on using this theory in listening classes up to this point. Based on the study's findings and conclusions, the following are the recommendations.

5.3.1 Recommendations for Implementation

1) In Zhejiang province, schema theory has been found to be effective in improving the English listening skills of grade 10 vocational high school students. As a result, incorporating schema theory into the teaching of listening skills in other grades should be encouraged.

2) Other English teachers are encouraged to use schema theory as a teaching technique to teach other English abilities such as speaking, reading, and writing.

3) Schema theory might be applied to other areas to see if they have similar benefits on students' learning outcomes, as long as it covers a broad range of subjects.

5.3.2 Recommendations for Future Research

Based on some of the study's limitations, the researcher would like to provide the following recommendations for further research.

1) This study included only four grade 10 vocational high school students from China's Zhejiang province. In a similar study, a larger sample from

different parts of the country may be employed, which would help with generalization and validation, as well as reassuring the validity of the conclusions achieved in this study.

2) Due to time constraints, this study was performed in a little more than a month. As a result, additional study should be conducted over a longer period of time in order to achieve more reliable and substantial results.

3) Additional studies of this nature might be undertaken by involving students from various grade levels in various schools across the country.

4) Another study concentrating on improving other language abilities such as speaking, reading, and writing might be done to help EFL teachers in China understand the challenges they confront.

5) This study might be replicated to look into the efficacy of schema theory at several levels, such as elementary, lower secondary, middle secondary, higher secondary, and college, and produce a range of outcomes.

All of the study's research objectives were met thanks to the findings, which showed that using schema theory to improve students' English listening skills and attitudes was effective. Any interested English language teachers in China and elsewhere should consider this as an option for more effective learning results in English language skill and education.

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Certificate of Approval

Shengzhou Secondary Vocational and Technical School

Subject: Approval to collect data for M.ED thesis

Dear Sir/Madame,

I'm currently enrolled in the master of education in curriculum and instruction at Rangsit University, Thailand. I'm conducting a research on "LEARNING MANAGEMENT USING SCHEMA THEORY FOR ENGLISH LISTENING SKILL: A CASE STUDY OF CHINESE VOCATIONAL HIGH SCHOOL STUDENTS IN ZHEJIANG PROVINCE". This research requires students' participation. The instruments involved during the pretest and posttest, semi-structured interview for obtaining the required data. Therefore, I would like to see permission from the administration to allow me to collect data at this school where the names and the identities of students will be kept confidential and undisclosed.

Yours Sincerely

Chenjie Li, student

Rangsit University, Thailand.

Since the study requires the data for analysis purpose, Chenjie Li would collect data from this school and you're kindly requested to allow her to collect data with the following condition:

Providing research participants with information to make an informed decision as to whether to take part in research (informed consent).

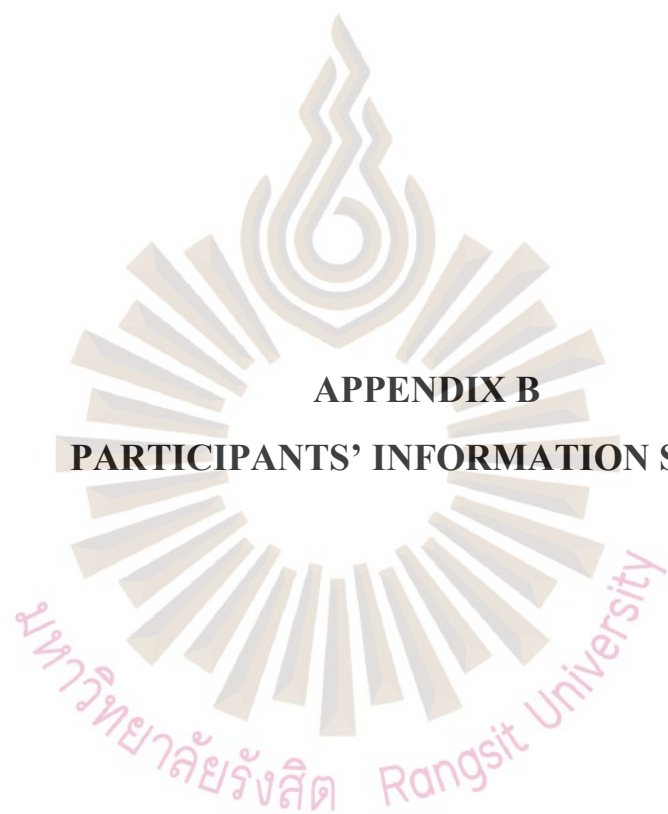
Follow the prior mentioned document have been reviewed and approved by the administration of Shengzhou Secondary Vocational and Technical School.

Signature: _____

Date: _____

2024.11.1

Shengzhou Secondary Vocational and Technical School, Administrative Department
Shengzhou County Education Center



APPENDIX B

PARTICIPANTS' INFORMATION SHEET



Participants' Legal Guardian Information Sheet

Dear Participants:

You are being invited to take part in a research study. Before you decide it, it is important for you to understand why the research is being done and what it will involve, please take time to read the following information carefully. Talk to others about the study if you wish.

Research School: Shengzhou Secondary Vocational and Technical School, Zhejiang province, China.

Name: Chenjie Li **Student ID:** 6305241

Studying University: Survadhep Teachers College of Rangsit University, Thailand.

Research Title: LEARNING MANAGEMENT USING SCHEMA THEORY FOR ENGLISH LISTENING SKILL: A CASE STUDY OF CHINESE VOCATIONAL HIGH SCHOOL STUDENTS IN ZHEJIANG PROVINCE

1. What's the purpose of the study?

To improve English listening skills of vocational high school students through the application of schema theory.

2. Expected Results

Vocational high school students' English listening skills will be improved after applying schema theory.

3. Outcome

Use of schema theory will yield out more effective achievement test of Grade 10 vocational high school students in Zhejiang province, China.

4. Number of Participants in the study 4 individuals.

5. Research Procedures: The research will collect data in 4 steps. First, to give a pretest to the participants. Second, apply schema theory to give the participants English listening lessons. Third, to give a posttest after all the lesson will have been

given. Fourth, to give a semi-structured interview to the participants to investigate their attitude towards the use of schema theory learning English listening skills.

6. Duration:

The research period will be 4 weeks, 8 sessions.

There is no possible risk in the research.

The school has asked the students who have volunteered to participate to inform their parents and has obtained consent to volunteer for the research, and the date from the study is true and valid. The school also allows 4 students to assist her with her thesis research, either voluntarily or by volunteered experiments, by agreeing to Chenjie Li, who is enrolled at Rangsit University in Thailand to research her thesis.

Signature: _____

Date: 2024.11.1

Shengzhou Secondary Vocational and Technical School, Administrative Department
Shengzhou County Education Center

มหาวิทยาลัยรังสิต Rangsit University



APPENDIX C

CONSENT LETTER FROM PARENTS/GUARDIAN

มหาวิทยาลัยรังสิต Rangsit University

Consent Letter form G1:

Consent Letter

Dear parents and students,

I'm currently enrolled in the master of education in curriculum and instruction, at Rangsit University, Thailand. I am conducting a research on the "LEARNING MANAGEMENT USING SCHEMA THEORY FOR ENGLISH LISTENING SKILL: A CASE STUDY OF CHINESE VOCATIONAL HIGH SCHOOL STUDENTS IN ZHEJIANG PROVINCE". This research requires students participation. The instruments involved during the study pretest and posttest, semi-structured interview for obtaining the required data. Therefore, I would like to seek your permission to let you and your children participate in this study. Their names, identification and schools will be kept confidential and anonymous.

I look forward your cooperation in approving your children to participate in this research study.

Yours sincerely

Chenjie Li

Student

Rangsit University

Thailand.

I acknowledge that the content of this research study has been thoroughly explained to me and any questions have been answered. I have read the letter provided by Ms Chenjie Li and have agreed to participate in the research as described.

Student Name: (袁山)

Signature: (袁山)

Parent Name: (袁立群)

Signature: (袁立群)

Date: 01/11/2021

วิทยาลัยรังสิต Rangsit University

Consent Letter form G2:

Consent Letter

Dear parents and students,

I'm currently enrolled in the master of education in curriculum and instruction, at Rangsit University, Thailand. I am conducting a research on the "LEARNING MANAGEMENT USING SCHEMA THEORY FOR ENGLISH LISTENING SKILL: A CASE STUDY OF CHINESE VOCATIONAL HIGH SCHOOL STUDENTS IN ZHEJIANG PROVINCE". This research requires students participation. The instruments involved during the study pretest and posttest, semi-structured interview for obtaining the required data. Therefore, I would like to seek your permission to let you and your children participate in this study. Their names, identification and schools will be kept confidential and anonymous.

I look forward your cooperation in approving your children to participate in this research study.

Yours sincerely

Chenjie Li

Student

Rangsit University

Thailand.

I acknowledge that the content of this research study has been thoroughly explained to me and any questions have been answered. I have read the letter provided by Ms Chenjie Li and have agreed to participate in the research as described.

Student Name: (姜明月) Signature: (姜明月)

Parent Name: (吴如越) Signature: (吴如越)

Date:

Consent Letter form B1:

Consent Letter

Dear parents and students,

I'm currently enrolled in the master of education in curriculum and instruction, at Rangsit University, Thailand. I am conducting a research on the "LEARNING MANAGEMENT USING SCHEMA THEORY FOR ENGLISH LISTENING SKILL: A CASE STUDY OF CHINESE VOCATIONAL HIGH SCHOOL STUDENTS IN ZHEJIANG PROVINCE". This research requires students participation. The instruments involved during the study pretest and posttest, semi-structured interview for obtaining the required data. Therefore, I would like to seek your permission to let you and your children participate in this study. Their names, identification and schools will be kept confidential and anonymous.

I look forward your cooperation in approving your children to participate in this research study.

Yours sincerely

Chenjie Li

Student

Rangsit University

Thailand.

I acknowledge that the content of this research study has been thoroughly explained to me and any questions have been answered. I have read the letter provided by Ms Chenjie Li and have agreed to participate in the research as described.

Student Name: (李晨洁)

Signature: (李晨洁)

Parent Name: (李五军)

Signature: (李五军)

Date: 01/11/2021

Consent Letter form B2:

Consent Letter

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Student Name: (李晨洁)

Signature: (李晨洁)

Parent Name: (郑利珍)

Signature: (郑利珍)

Date: 01/11/2021



APPENDIX D

IOC FOR LESSON PLANS

มหาวิทยาลัยรังสิต Rangsit University

Item Objective Congruence for Lesson Plans

- ✓ Rate +1, if the item clearly matches the stated objectives.
- ✓ Rate 0, if the item is unclear or unsure whether the measures meet the stated objectives.
- ✓ Rate -1, if the item does not clearly match the stated objectives.

Sl. No	Attributes	Rating by Expert 1	Rating by Expert 2	Rating by Expert 3	IOC Average	Congruence
1	Lesson Plan 1	+1	+1	+1	+1	Congruent
2	Lesson Plan 2	+1	+1	+1	+1	Congruent
3	Lesson Plan 3	+1	+1	+1	+1	Congruent
4	Lesson Plan 4	+1	+1	+1	+1	Congruent
Overall Average		+1	+1	+1	+1	Congruent



APPENDIX E

LESSON PLANS

มหาวิทยาลัยรังสิต Rangsit University

Lesson Plan 1 (Session:1&2)

Subject: English

Topic: A Child's Angel

Grade: 10

Class Strengths: 4 students

Time: 80 minutes (40 minutes/1session)

Students' background knowledge: Students have been learning English for more than three years and have basic listening, speaking, reading and writing skills.

Teaching and learning strategy: Schemata, question and answer, heuristic teaching.

Teaching and learning materials: Online learning material, ppt, laptop.

Lesson Objectives: After the course, students can:

1. Grasp the key words (castle, patience, control, helpless, bolt, stream, defend, touched, protect, shoulder) and know their pronunciation. Grasp the key phrases and know their grammar.
2. Gradually use schemata to understand listening materials.

Session 1

Stage & Duration	Teacher's activities	Student' activities
Greeting and Checking (2 minutes)	<ol style="list-style-type: none"> 1. Greet student. 2. Check students' presence and make sure they can hear me clearly. 	<ol style="list-style-type: none"> 1. Greet teacher. 2. Answer the roll call and make sure stable network.
Lead in (8 minutes)	<ol style="list-style-type: none"> 1. Teacher show a picture about "mom". 2. Can you guess today's topic and do you know great deeds about mothers in history? 3. Share my story about my mom. 4. Can you share your most impressive story with your mom? Use the above ways to activate the schema using the knowledge that students already have. 5. Praise students who answer questions and help them answer questions smoothly if they encounter obstacles. 	<ol style="list-style-type: none"> 1. Student will guess the topic and make association about the topic. 2. Students will show some history story about the "mom".

Lesson Plan 1 (Session:1&2) (Cont.)

Pre-listening (5minutes)	Explain the meaning of the key words like “castle, patience, control, helpless” and some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the	Students will have a basic concepts of the key words and key phrases.
	foundation for the formation of new schemas.	
While-listening (15 minutes)	Teacher will play the video twice. When play at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer. When play at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teachers need to write the gist and details on blank ppt slide in chronological order. This is the process of using schemas to solve problems.	Students will answer what is the gist of the listening material after listening at first time and answer some questions about listening material details after listening at second time.
Post-listening (5 minutes)	Before this, teachers will explain related grammar. Activity1: Teacher will show the listening material in text and invite 2 students to role play. Activity2: Invite students to make sentences with key words and key phrases. This is a way to reinforce and consolidate student schemas.	Activity1: Students will role play the two main character in the listening material and make conversation. Activity2: Students will make sentences with key words and key phrases.
Summary and Homework (5minutes)	Summary: Invite students to retell the listening materials briefly according to the key words and key phrase on blank ppt slide and praise them. Homework: Recite key words and key phrases, accumulate knowledge and enhance schema.	Summary: Students will retell briefly. Homework: students will recite key words and key phrases.

Lesson Plan 1 (Session:1&2) (Cont.)

Session2		
Stage & Duration	Teacher's activities	Student' activities
Greeting and Checking (2 minutes)	1. Greet student. 2. Check students' presence and make sure they can hear me clearly.	1. Greet teacher. 2. Answer the roll call and make sure stable network.
Lead in (3 minutes)	Ask students if they remember what they taught in the last class to activate their schema. If possible, invite one to retell briefly and praise the student.	Students will recall the content of last class. If possible, one student will retell briefly.
Pre-listening (7minutes)	Explain the meaning of the key words like "bolt, stream, defend, touched, protect, shoulder" and some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the foundation for the formation of new schemas.	Students will have some basic concepts of the key words and key phrases.
While-listening (15 minutes)	Teacher will play the video twice. When play at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer. When play at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teachers need to write the gist and details on blank ppt slide in chronological order. This is the process of using schemas to solve problems.	Students will answer what is the gist of the listening material after listening at first time and answer some questions about listening material details after listening at second time.
Post-listening (9 minutes)	Activity1: Teacher will show the listening material in text and invite 2 students to role play.	

Lesson Plan 1 (Session:1&2) (Cont.)

	<p>Activity2: Invite students to make sentences with key words and key phrases. Before this, teachers will explain related grammar.</p> <p>Activity3: Invite students to express their post listening feelings on listening topics and discuss.</p> <p>This is a way to reinforce and consolidate student schemas.</p>	<p>Activity1: Students will role play the two main character in the listening material and make conversation.</p> <p>Activity2: Students will make sentences with key words and key phrases.</p> <p>Activity3: Students will express their feelings after listening.</p>
Summary and Homework (4 minutes)	<p>Summary: Invite students to retell the listening materials briefly according to the key words and key phrase on blank ppt slide and praise them.</p> <p>Homework: Recite key words and key phrases, accumulate knowledge and enhance schema.</p>	<p>Summary: Students will retell briefly.</p> <p>Homework: students will recite key words and key phrases.</p>

Lesson Plan 2 (Sessions 3&4)

<p>Subject: English</p> <p>Topic: So Much to Learn</p> <p>Grade: 10</p> <p>Class Strengths: 4 students (2 males&2 females)</p> <p>Time: 80 minutes (40 minutes/1session)</p> <p>Students' background knowledge: Students have been learning English for more than three years and have basic listening, speaking, reading and writing skills.</p> <p>Teaching and learning strategy: Schemata, question and answer, heuristic teaching.</p> <p>Teaching and learning materials: Online learning material, ppt, laptop.</p> <p>Lesson Objectives: After the course, students can:</p> <ol style="list-style-type: none"> 1. Grasp the key words (confidence, minutes, conquer, commencement, assurance, impress, frightened, collect) and know their pronunciation. Grasp the key phrases and know their grammar. 2. Gradually use schemata to understand listening materials.
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Lesson Plan 2 (Sessions 3&4) (Cont.)

Session 3		
Stage & Duration	Teacher's activities	Student' activities
Greeting and Checking (2 minutes)	<ol style="list-style-type: none"> 1. Greet student. 2. Check students' presence and make sure they can hear me clearly. 	<ol style="list-style-type: none"> 1. Greet teacher. 2. Answer the roll call and make sure stable network.
Lead in (3 minutes)	<ol style="list-style-type: none"> 1. Teacher show a picture about "examination room". 2. Can you guess today's topic and what do you usually think before taking the exam? 3. Share my most impressive experience. 4. Invite students to share their stories. Use the above ways to activate schema using the knowledge that students already have. 5. Praise students who answer questions and help them answer questions smoothly if they encounter obstacles. 	<ol style="list-style-type: none"> 1. Student will guess the topic and make association about the topic. 2. Students will share their feelings.
Pre-listening (7minutes)	<p>Explain the meaning of the key words like "confidence, minutes, conquer, commencement, assurance" and some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the foundation for the formation of new schemas.</p>	<p>Students will have basic concepts of the key words and key phrases.</p>
While-listening (15 minutes)	<p>Teacher will play the video twice. When playing at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer. When playing at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teacher needs to write the gist and details on ppt slide in chronological order. This is the process of using schemas to solve problems.</p>	<p>Students will answer what is the gist of the listening material after listening at first time and answer some questions about listening material details after listening at second time.</p>

Lesson Plan 2 (Sessions 3&4) (Cont.)

Post-listening (7 minutes)	Before this, teachers will explain related grammar. Activity1: Invite students to make sentences with key words and key phrases. Activity2: Can you predict what will happen next? This is a way to reinforce and consolidate student schemas.	Activity1: Students will make sentences with key words and key phrases. Activity2: Students will predict the following plot.
Summary and Homework (6 minutes)	Summary: Invite students to retell the listening materials briefly according to the key words and key phrase on blank ppt slide and praise them. Homework: Recite key words and key phrases, accumulate knowledge and enhance schema.	Summary: Students will retell briefly. Homework: students will recite key words and key phrases.
Session 4		
Stage & Duration	Teacher's activities	Student' activities
Greeting and Checking (2 minutes)	1. Greet student. 2. Check students' presence and make sure they can hear me clearly.	1. Greet teacher. 2. Make sure stable network.
Lead in (3 minutes)	Ask students if they remember what they taught in the last class to activate their schema. If possible, invite one to retell briefly and praise the student.	Students will recall the content of last class. If possible, one student will retell briefly.
Pre-listening (7minutes)	Explain the meaning of the key words like "impress, frightened, collect" and some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the foundation for the formation of new schemas.	Students will have some basic concepts of the key words and key phrases.

Lesson Plan 2 (Sessions 3&4) (Cont.)

While-listening (15 minutes)	Teacher will play the video twice. When playing at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer. When playing at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teacher needs to write the gist and details on blank ppt slide in chronological order. This is the process of using schemas to solve problems.	Students will answer what is the gist of the listening material after listening at first time and answer some questions about listening material details after listening at second time.
Post-listening (9 minutes)	Before this, teacher will explain the related grammar. Activity1: Can you sum up the main idea of the professor? Activity2: Invite students to make sentences with key words and key phrases. This is a way to reinforce and consolidate student schemas.	Activity1: Students will sum up professor's idea. Activity2: Students will make sentences with key words and key phrases.
Summary and Homework (4 minutes)	Summary: Invite students to retell the listening materials briefly according to the key words and key phrase on blank ppt slide and praise them. Homework: Recite key words and key phrases, accumulate knowledge and enhance schema.	Summary: Students will retell briefly. Homework: students will recite key words and key phrases.

Lesson Plan 3 (Session5&6)

Subject: English

Topic: The Time Account

Grade: 10

Class Strengths: 4 students

Time: 80 minutes (40 minutes/1session)

Students' background knowledge: Students have been learning English for more than three years and have basic listening, speaking, reading and writing skills.

Lesson Plan 3 (Sessions 5&6) (Cont.)

<p>Teaching and learning strategy: Schemata, question and answer, heuristic teaching.</p> <p>Teaching and learning materials: Online learning material, ppt, laptop.</p> <p>Lesson Objectives: After the course, students can:</p> <ol style="list-style-type: none"> 1. Grasp the key words (polish, offspring, rational, retrieve, medal, athlete, pregnancy, affected, mystery, adversity, premature) and know their pronunciation. Grasp the key phrases and know their grammar. 2. Gradually use schemata to understand listening materials. 		
Session 5		
Stage & Duration	Teacher's activities	Student' activities
Greeting and Checking (2 minutes)	<ol style="list-style-type: none"> 1. Greet student. 2. Check students' presence and make sure they can hear me clearly. 	<ol style="list-style-type: none"> 1. Greet teacher. 2. Answer the roll call and make sure stable network.
Lead in (6 minutes)	<ol style="list-style-type: none"> 1. Teacher show a picture about "bank account". 2. Do you have a bank account? Do you know what's the function of bank? 3. Share my mood when I got my first bank account. Use the above ways to activate the schema using the knowledge that students already have. 4. Praise students who answer questions and help them answer questions smoothly if they encounter obstacles. 	<ol style="list-style-type: none"> 1. Student will guess the topic and make association about the topic. 2. Students will share what they know about bank.
Pre-listening (7minutes)	Explain the meaning of the key words like "polish, offspring, rational" and some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the foundation for the formation of new schemas.	Students will have a basic concepts of the key words and key phrases.
While-listening (15 minutes)	Teacher will play the video twice. When play at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer.	Students will answer what is the gist of the listening material after listening at first time.

Lesson Plan 3 (Sessions 5&6) (Cont.)

	When playing at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teachers need to write the gist and details on blank ppt slide in chronological order. This is the process of using schemas to solve problems.	And they will answer some questions about listening material details after listening at second time.
Post-listening (5 minutes)	Activity1: Brainstorm to answer what would you do if the end of the world was coming and there was only one day / week / month / year? Activity2: Can you translate the following English sentences into Chinese famous aphorism? E.g.: 1. An inch of time is an inch of gold but you can't buy that inch of time with an inch of gold (一寸光阴一寸金, 寸金难买寸光阴) 2. A young idler, an old beggar (少壮不努力, 老大徒伤悲) This is a way to reinforce and consolidate student schemas.	Activity1: Ask the four students to answer four questions one by one? Activity2: Students will guess the corresponding famous aphorism based on accumulated knowledge(schema) and they will learn some aphorism.
Summary and Homework (5 minutes)	Summary: Invite students to conclude what they learn in this class and praise them. Homework: Watch an English movie and its topic is time. Share it in next class.	Summary: Students will conclude briefly. Homework: watch a movie to practice English listening skill and accumulate related knowledge to accumulate schemata.
Session 6		
Stage & Duration	Teacher's activities	Student' activities
Greeting and Checking (2 minutes)	1. Greet student. 2. Check students' presence and make sure they can hear me clearly.	1. Greet teacher. 2. Answer the roll call and make sure stable network.

Lesson Plan 3 (Sessions 5&6) (Cont.)

Lead in (3 minutes)	Ask students if they watch a movie about time to activate their schema. If possible, randomly invite one to tell the story briefly and praise the student. Use the above ways to activate the schema using the knowledge that students already have.	Students will recall the movie he/she watched. If possible, one student will retell briefly.																		
Pre-listening (7minutes)	Explain the meaning of the key words like “retrieve, medal, athlete, pregnancy, affected, mystery, adversity, prematures” and some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the foundation for the formation of new schemas.	Students will have a basic concept of the key words and key phrases.																		
While-listening (15 minutes)	<p>Teacher will play the video twice. When play at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer. When play at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teachers need to write the gist and details on blank ppt slide in chronological order. This is the process of using schemas to solve problems.</p> <table border="1" data-bbox="547 1507 1054 1984"> <thead> <tr> <th colspan="2">Blackboard: Fill in the blank</th> </tr> </thead> <tbody> <tr> <td>Duration</td> <td>Who will realize the importance?</td> </tr> <tr> <td>One year</td> <td></td> </tr> <tr> <td></td> <td>mother</td> </tr> <tr> <td>One week</td> <td></td> </tr> <tr> <td>One hour</td> <td></td> </tr> <tr> <td></td> <td>traveler</td> </tr> <tr> <td>One second</td> <td></td> </tr> <tr> <td>One millisecond</td> <td></td> </tr> </tbody> </table>	Blackboard: Fill in the blank		Duration	Who will realize the importance?	One year			mother	One week		One hour			traveler	One second		One millisecond		Students will answer what is the gist of the listening material after listening at first time and answer some questions about listening material details after listening at second time.
Blackboard: Fill in the blank																				
Duration	Who will realize the importance?																			
One year																				
	mother																			
One week																				
One hour																				
	traveler																			
One second																				
One millisecond																				

Lesson Plan 3 (Sessions 5&6) (Cont.)

Post-listening (7 minutes)	Activity1: Invite students to make sentences with key words and key phrases. Before this, teachers will explain related grammar. Activity2: In what ways will you cherish	Activity1: Students will make sentences with key words and key phrases. Activity2: Students
	your time in the future? Who else will cherish time more than the people in the article? This is a way to reinforce and consolidate student schemas.	will share their ideas.
Summary and Homework (6 minutes)	Summary: Invite students to retell the listening materials briefly according to the key words and key phrase on blank ppt slide and praise them. Homework: Recite key words and key phrases, accumulate knowledge and enhance schema.	Summary: Students will retell briefly. Homework: students will recite key words and key phrases.

Lesson Plan 4 (Sessions 7&8)

Subject: English**Topic:** The Time Account**Grade:** 10**Class Strengths:** 4 students (2 males&2 females)**Time:** 80 minutes (40 minutes/1session)**Students' background knowledge:** Students have been learning English for more than three years and have basic listening, speaking, reading and writing skills.**Teaching and learning strategy:** Schemata, question and answer, heuristic teaching.**Teaching and learning materials:** Online learning material, ppt, laptop.**Lesson Objectives:** After the course, students can:

1. Grasp the key words (prudence, funds, advantage, dealing, privilege, honesty, smart) and know their pronunciation. Grasp the key phrases and know their grammar.
2. Gradually use schemata to understand listening materials.

Session 7

Stage & Duration	Teacher's activities	Student' activities
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Lesson Plan 4 (Sessions 7&8) (Cont.)

Greeting and Checking (2 minutes)	1. Greet student. 2. Check students' presence and make sure they can hear me clearly.	1. Greet teacher. 2. Answer the roll call and make sure stable network.
Lead in (3 minutes)	1. Teachers will ask students whether they know the story called "The Million Pound Note"? Who can share the story briefly? Use the above ways to activate the schema	Student will share the story briefly.
	using the knowledge that students already have. 2. Praise students who answer questions and help them answer questions smoothly if they encounter obstacles. If they don't know the story, teacher will share it.	
Pre-listening (7minutes)	Explain the meaning of the key words like "polish, offspring, rational" and some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the foundation for the formation of new schemas.	Students will have a basic concept of the key words and key phrases.
While-listening (15 minutes)	Teacher will play the video twice. When playing at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer. When playing at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teachers need to write the gist and details on blank ppt slide in chronological order. This is the process of using schemas to solve problems.	Students will answer what is the gist of the listening material after listening at first time and answer some questions about listening material details after listening at second time.
Post-listening (7 minutes)	Activity1: Ask students to guess the conversion relationship between various monetary units according to the relationship between the text.	Activity1: students will predict the relation among monetary units.

Lesson Plan 4 (Sessions 7&8) (Cont.)

	<table border="1"> <tr> <td>Blackboard</td> </tr> <tr> <td>() pound= () shilling= () groat</td> </tr> </table> <p>Activity2: brainstorming to discuss what kind of business do you want to do if you have saved money for ¥ 1,000/ ¥ 10,000/ ¥ 100,000/ ¥ 1,000,000?</p> <p>This is a way to reinforce and consolidate student schemas.</p>	Blackboard	() pound= () shilling= () groat	Activity2: Students will be asked to answer the question one by one.
Blackboard				
() pound= () shilling= () groat				
Summary and Homework (6 minutes)	<p>Summary: Invite students to conclude what they learn in this class and praise them.</p> <p>Homework: recommend students to watch the famous English movie called “The Million Pound Note”. In the meantime, they will accumulate English knowledge and improve their English listening ability.</p>	<p>Summary: Students will conclude the topic “save money” briefly.</p> <p>Homework: They will watch a movie.</p>		
Session 8				
Stage & Duration	Teacher’s activities	Student’ activities		
Greeting and Checking (2 minutes)	<ol style="list-style-type: none"> Greet student. Check students’ presence and make sure they can hear me clearly. 	<ol style="list-style-type: none"> Greet teacher. Answer the roll call and make sure stable network. 		
Lead in (3 minutes)	Ask students if they watch a movie recommended to activate their schema. If possible, randomly invite one to tell the story briefly and praise the student.	Students will recall the movie he/she watched. If possible, one student will retell briefly.		
Pre-listening (7minutes)	Explain the meaning of the key words like “quarrel, superfluous, willing, credit, escape, deficiency, unnecessary, equivalent”.	Students will have a basic concept of the key words and key phrases.		

Lesson Plan 4 (Sessions 7&8) (Cont.)

	And explain some key phrases in English to make students better overcome listening obstacles. Teach new words and lay the foundation for the formation of new schemas.										
While-listening (15 minutes)	Teacher will play the video twice. When playing at the first time, teacher will ask the students to master the gist of the listening materials and invite some students to answer. When playing at the second time, teacher will ask the students to master the details and invite some students to answer. During this period, teacher needs to write the gist and details on blank ppt slide in chronological order.	Students will answer what is the gist of the listening material after listening at first time and answer some questions about listening material details after listening at second time.									
	<p>This is the process of using schemas to solve problems.</p> <table border="1"> <tr> <td>who</td> <td>e.g. who sells upon credit</td> <td>Who buys upon credit</td> </tr> <tr> <td>what</td> <td>e.g. sells equivalent to the principal and interest of his money</td> <td>pays interest for what he buys</td> </tr> <tr> <td>why</td> <td>e.g. to make up that deficiency</td> <td>pay their share of this advance</td> </tr> </table>	who	e.g. who sells upon credit	Who buys upon credit	what	e.g. sells equivalent to the principal and interest of his money	pays interest for what he buys	why	e.g. to make up that deficiency	pay their share of this advance	
who	e.g. who sells upon credit	Who buys upon credit									
what	e.g. sells equivalent to the principal and interest of his money	pays interest for what he buys									
why	e.g. to make up that deficiency	pay their share of this advance									
Post-listening (7 minutes)	<p>Activity1: Invite students to make sentences with key words and key phrases. Before this, teachers will explain related grammar.</p> <p>Activity2: Ask students to put forward small wishes that they can realize with money and answer why? meet their wishes as gifts for their participation in the study.</p>	<p>Activity1: Students will make sentences with key words and key phrases.</p> <p>Activity2: students will share their wishes and answer why.</p>									

Lesson Plan 4 (Sessions 7&8) (Cont.)

	This is a way to reinforce and consolidate student schemas.	
Summary and Homework (6 minutes)	<p>Summary: Ask students to conclude what you learn from this lesson and praise them.</p> <p>Homework: Recite key words and key phrases, accumulate knowledge and enhance schema.</p>	<p>Summary: students will conclude their idea.</p> <p>Homework: students will recite key words and key phrases.</p>





APPENDIX F

IOC FOR ACHIEVEMENT TEST

IOC FOR ACHIEVEMENT TEST

- ✓ Rate +1, if the item clearly matches the stated objectives.
- ✓ Rate 0, if the item is unclear whether the measures meet the stated objectives.
- ✓ Rate -1, if the item does not clearly match the stated objectives.

Sl. No	Attributes	Rating by Expert 1	Rating by Expert 2	Rating by Expert 3	IOC Average	Congruence
1	Question 1	+1	+1	+1	+1	Congruent
2	Question 2	+1	+1	+1	+1	Congruent
3	Question 3	+1	+1	+1	+1	Congruent
4	Question 4	+1	+1	+1	+1	Congruent
5	Question5	+1	+1	+1	+1	Congruent
6	Question6	+1	+1	+1	+1	Congruent
7	Question7	+1	+1	+1	+1	Congruent
8	Question8	+1	+1	+1	+1	Congruent
9	Question9	+1	+1	+1	+1	Congruent
10	Question10	+1	+1	+1	+1	Congruent
11	Question11	+1	+1	+1	+1	Congruent
12	Question12	+1	+1	+1	+1	Congruent
13	Question13	+1	+1	+1	+1	Congruent
14	Question14	+1	+1	+1	+1	Congruent
15	Question15	+1	+1	+1	+1	Congruent
16	Question16	+1	+1	+1	+1	Congruent
17	Question17	+1	+1	+1	+1	Congruent
18	Question18	+1	+1	+1	+1	Congruent
19	Question19	+1	+1	+1	+1	Congruent
20	Question20	+1	+1	+1	+1	Congruent
Overall Average		+1	+1	+1	+1	Congruent



APPENDIX G
AN ACHIEVEMENT TEST

Pretest & posttest questions and text

Achievement Test	
Part1 (Comprehension Skill): Q1 ~ Q10	
Q1	Will Gina attend Amily's birthday party? A. Yes, she will. B. No, she won't. C. Not mentioned.
Q2	Did the ship sail smoothly that day? A. Yes, it is. B. No, it isn't. C. No, the ship was damaged.
Q3	Why doesn't Jane eat her chocolate cake? A. She doesn't like chocolate. B. She has trouble with her tooth. C. She want to stay thin.
Q4	Where does the conversation take place? A. In the bedroom. B. In the toilet. C. In the kitchen.
Q5	Where will the boy go this afternoon? A. To the post office. B. To the lab. C. To his home.
Q6	What does the woman think of herself? A. Careless B. Unfortunate C. Hopeless
Q7	What can we learn about the boy? A. He often finds excuses to be off. B. His grandfather is often ill. C. His grandfather died.
Q8	What will the woman probably do? A. Catch a train. B. See the man off. C. Go shopping.
Q9	What will the girl do tomorrow? A. Write a composition. B. Go to a concert.

	C. Have some classes.
Q10	What does the girl mean? A. Matthew is good at math. B. Matthew can't work out the problem. C. Matthew likes eating cakes.
Part 2 (Analytical Skill): Q11 ~ Q20	
Q11	What does the man mean? A. Mark should go on with the game. B. Mark should draw pictures on the computer. C. Mark should review his lessons.
Q12	What will the man give his mother? A. A dress. B. Some money. C. A coat.
Q13	What will the boy be doing at 6:30? A. Doing his homework. B. Seeing a film in the cinema. C. Playing football.
Q14	What can we learn from the conversation? A. The mother finally doesn't allow her son to hitch-hike. B. The mother finally allows her son to hitch-hike. C. The son is ready to go without his mother's permission.
Q15	How much will the woman pay? A. Eight yuan. B. Six yuan. C. Four yuan.
Q16	When will the next bus leave for Beijing? A. 10:07 B. 10:30 C. 11:00
Q17	When will the family go to the concert? A. On Saturday afternoon. B. On Saturday evening. C. On Sunday morning.
Q18	When does the first flight arrive in Detroit? A. 5:18 am B. 6:10 am C. 8:50 am

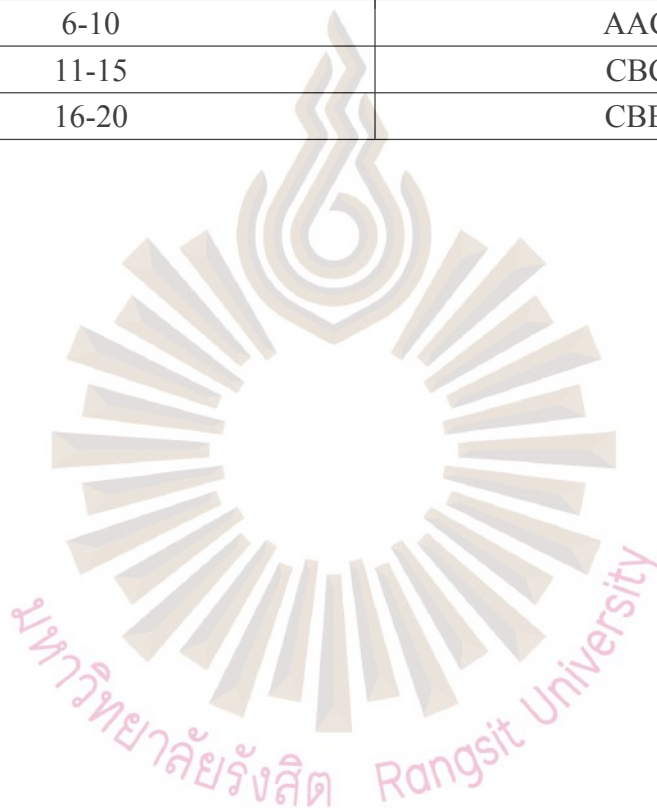
Q19	At what time will the film begin? A. 7:20 B. 7:15 C. 7:00
Q20	When does the bank close on Saturday? A. At 1:00 pm B. At 3:00 pm C. At 4:00 pm

Script of Listening Achievement Tests	
Text1	M: Gina, are you going to attend Amily's birthday party? W: Actually, we used to be good friends, but fell apart about a year ago.
Text2	M: The ship was due to sail the following morning. W: Unfortunately, it was a typhoon day.
Text3	M: Why don't you eat your chocolate cake, Jane? Don't you like chocolate? W: Yes, I do. But I am having trouble with my bad tooth.
Text4	M: How about my fish? W: It couldn't be better. Cooking is really your field.
Text5	W: If you want to go to the post office, you can use my bike. M: I won't go anywhere this afternoon. I messed a chemistry experiment up. I'll be redoing it.
Text6	M: Mary, you didn't do well in today's engineering test. What was the matter? W: I was in a hurry, and I didn't check my answers. M: That's too bad you didn't think of it before. W: Sorry, Mr. Smith. If only I had been more careful!
Text7	W: What? You want another day off? I'm anxious to hear what excuse you have this time? You have been off for your grandfather's funeral four times already. M: But today my grandma is getting married again.
Text8	W: It's nearly eight. If you want to catch the nine o'clock train, you'd better go now. M: Don't worry, I'll drive to the station. W: In that case, let me go with you. And you drop me off at the city center. I'll go to the open market.
Text9	M: I've got two tickets for the concert. Will you go with me? W: But I have to stay at school writing a composition. M: Why not do it tomorrow? We have no classes the whole day.

	W: Oh, I forgot. All right, then.
Text10	W: You look worried. What's up? M: I can't work out this math problem. W: Why not ask Matthew? Math is always a piece of cake for him.
Text11	M: I had always impressed upon the children that if they worked hard they would succeed in final test. W: But Mark's playing computer games. M: Should he do that when the final exam is drawing near?
Text12	W: Shall I buy a dress for Mum as a birthday present? M: But Jenny has bought one for her yesterday. You can buy her a coat if you like. W: Well, what will you give Mum? M: I think 200 dollars is better than anything else.
Text13	W: Bob, if you can finish your homework before 6, I will take you to the cinema. M: I'm able to do this in time. But I'd like to go to the park to play football. W: OK. But you must return home for dinner before 8.
Text14	M: Hey, Mom. I'm thinking of hitch-hiking around Europe this summer. What do you think? W: Hitch-hiking? That sounds dangerous! You shouldn't go by yourself. You ought to go with a friend. M: Yes, I have thought of that.
Text15	M: The notebooks are two yuan each, but you can have two for three yuan. W: Then I will take four of them.
Text16	W: When will the next bus leave for Beijing? M: Buses leave for Beijing every thirty minutes. You've just missed the ten thirty bus by seven minutes.
Text17	W: Did you do your homework this afternoon? M: I'm sorry, Mom, but I'll do it this evening W: Don't you remember we'll go to the concert this evening? M: Then I will do it tomorrow morning. It'll be Sunday, you know.
Text18	W: Midwest Air, may I help you? M: Yes, what is your daily flight schedule from Chicago to Detroit. W: Let me see, our first flight is 5:18 am, and there is one from 8 am, arriving at 8:50 am. M: Ok, thanks.
Text19	M: Hurry up, Jenny, it's already seven. We'll be late for the film. W: Don't worry, dear, we still have twenty minutes. And it takes us only

	fifteen minutes to get there. We'll be there just in time.
Text20	W: National bank, can I help you? M: Yes, please, what are your business hour? W: We open at nine and close at four during the week, and on Saturday we close one hour earlier at three. And we're closed on Sunday.

Question Answers	
1-5	BBBCB
6-10	AACBA
11-15	CBCBB
16-20	CBBAB





APPENDIX H

IOC FOR SEMI-STRUCTURED INTERVIEW

Item-Objective Congruence for Semi-Structured Interview Validation

The index of IOC core ranges from -1 to +1.

- ✓ +1 indicates that the item clearly matches the stated objectives.
- ✓ 0 indicates that the item is unclear whether the measures meet the stated objectives.
- ✓ -1 indicates that the item is clearly not measuring the stated objectives.

SI No.	Items	Expert 1	Expert 2	Expert 3	Average	Congruence
PART A: INTEREST & MOTIVATION						
1	Did you like learning English? How?	+1	+1	+1	+1	Congruent
2	Did you find the learning process of this English course interesting?	+1	+1	+1	+1	Congruent
PART B: ENGAGEMENT						
3	Did you like to participate in class activities? Why?	+1	+1	+1	+1	Congruent
4	To what extent can you accept the listening method of establishing schema	+1	+1	+1	+1	Congruent

	before listening?					
PART C: EFFICACY OF SCEMA THEORY ON STUDENTS' ENGLISH LISTENING SKILL LEARNING						
5	How did you feel about using schema theory to understand listening material?	+1	+1	+1	+1	Congruent
6	How did schema theory make it easy to understand listening material?	+1	+1	+1	+1	Congruent
7	Have you improved your listening skills after this course? How?	+1	+1	+1	+1	Congruent
8	Did you like to continue understanding English listening materials using schema theory? Why?	+1	+1	+1	+1	Congruent
Overall Average		+1	+1	+1	+1	Congruent



Semi-structured Interview questions

The semi-structured interview includes 8 questions that will be used to investigate student satisfaction.

1. Did you like learning English? How?
2. Did you find the learning process of this English course interesting?
3. Did you like to participate in class activities? Why?
4. To what extent can you accept the listening method of establishing schema before listening?
5. How did you feel about using schema theory to understand listening material?
6. How did schema theory make it easy to understand listening material?
7. Have you improved your listening skills after this course? How?
8. Did you like to continue understanding English listening materials using schema theory? Why?





APPENDIX J

PRETEST AND POSTTEST SAMPLES

G1's Pretest:

Student Name: 袁仙

1-5 : B B C A A

6-10 : B C A B A

11-15 : A B C A B

16-20 : C C A A B

G1's Posttest:

Student Name: 袁仙

1-5 : B B B C A

6-10 : A C A B A

11-15 : C B C B B

16-20 : C B A A B

G2's Pretest:

Student Name: 姜明玥

1-5 : A B C C A

6-10 : A B A A B

11-15 : B B C B C

16-20 : B C C B

G2's Posttest:

Student Name: 姜明玥

1-5 : A B C C B

6-10 : A B A B B

11-15 : C B C B B

16-20 : B B C A B

B1's Pretest:

Student Name: 李晨雷
 1~5: ABBCA
 6~10: BBABCB
 11~15: CAAAB
 16~20: BCCCB

B1's Posttest:

Student Name: 李晨雷
 1~5: BBBCA
 6~10: ABBBA
 11~15: CBCBA
 16~20: BB CAB

B2's Pretest:

Student Name: 李晨雷
 1~5: BBBA
 6~10: BBAAB
 11~15: ACCB
 16~20: ACCBB

B2's Posttest:

Student Name: 李晨雷
 1~5: BBBA
 6~10: ABAB
 11~15: ACCB
 16~20: CCBAB



APPENDIX K
KR-20 RESULTS

มหาวิทยาลัยรังสิต Rangsit University

Reliability test: KR-20 for an analysis

This paper covered 20 multiple-choices, with 10 questions for each dimension. Each of its dimensions was analyzed separately using KR-20, where the sample size $N=30$. The data are in the following tables Figure1, Figure2, and Figure3 shows the general data analysis of the whole 20 questions, indicating that this test paper is acceptable.

Multiple Choices for Testing Comprehension Skill

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.717	.718	10

Figure1

Multiple Choices for Testing Analytical Skill

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.833	.829	10

Figure2

Multiple Choices for the Whole Test Paper

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.891	.890	20

Figure3



Experts Who Validated the Instruments

SL. No	Name	Position Title	Institution
1	Mr. Gary Torremucha	Professor	Rangsit English Language Institute
2	Fangrong Jiang	English Lecturer Master degree in Education	Zhejiang Tourism Vocational College, China
3	Rongying Chen	English Lecturer Master degree in Education	Guangdong Chaozhou Health Vocational College, China



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