

**ONLINE ACTIVE LEARNING ACTIVITIES TO ENHANCE
ENGLISH WRITING SKILLS FOR NON-NATIVE SPEAKERS IN
VOCATIONAL COLLEGE**



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Thesis Title ONLINE ACTIVE LEARNING ACTIVITIES TO ENHANCE ENGLISH WRITING SKILLS FOR NON-NATIVE SPEAKERS IN VOCATIONAL COLLEGE

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ABSTRACT

The purposes of this study were to (1) To design non-native speakers' Online Vocabulary Active Learning activities in English writing skills in a higher vocational college. (2) To compare pre test and post test score of students' English writing learning achievements. (3) To investigate the satisfaction of Chinese higher vocational college students with their online vocabulary Active English writing Learning Activities. The subject of the study were 30 students from Zhejiang Vocational College. The research tools include online active English learning activities, pre-test and post test, and a questionnaire to measure students' satisfaction with online active English learning activities. Statistics for data analysis were percentage, arithmetic mean, standard deviation, and t-test dependent. The results were as follows: (1) Online Vocabulary Active Learning activities in English writing skills is conducive to improving students' writing performance. And the average score of the three experts was 4.50, so that the level of the lesson plan was high. (2) Students' achievement in the post-test is higher than that in the pre-test. (3) Online Vocabulary Active Learning activities in English writing skills is conducive to improving students' satisfaction with online active English teaching.

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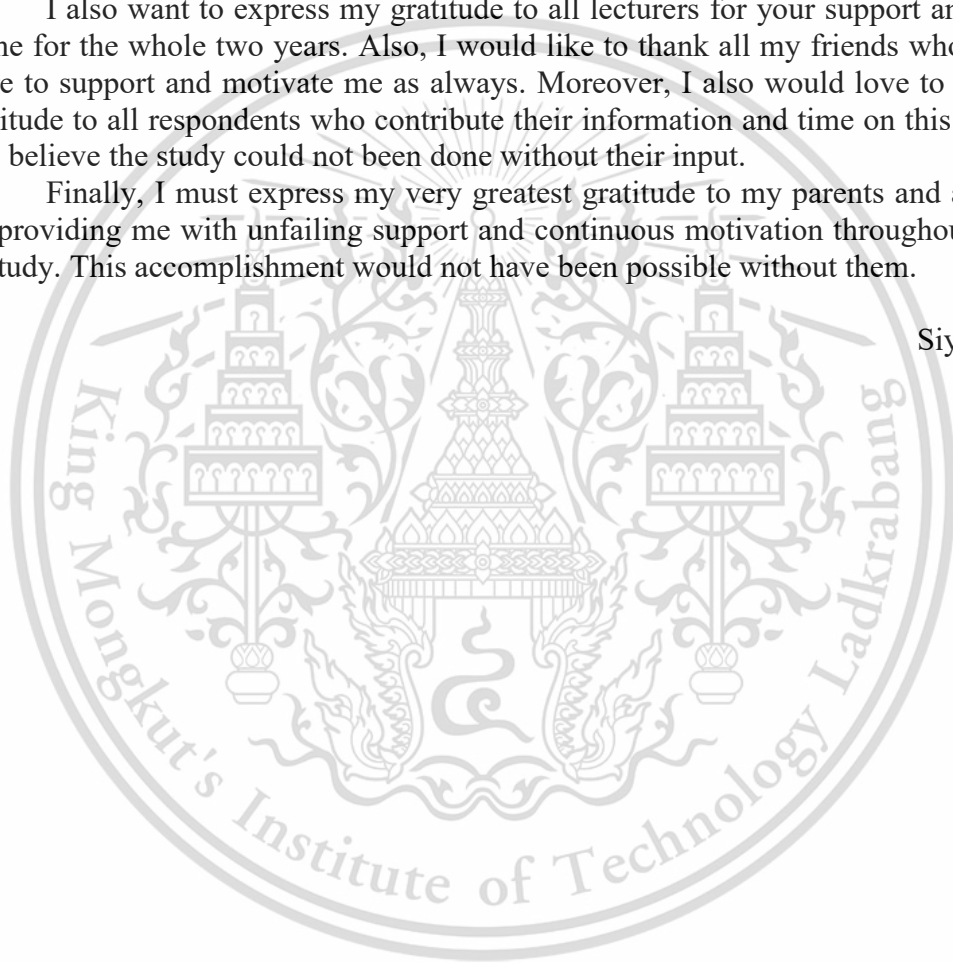


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CHAPTER 1

INTRODUCTION

1.1 Research Background and Problems

With the advent of the digital economy era, the Internet for learning has become a standard learning mode. Online learning has the following advantages: Firstly, online learning breaks through the limitation of time and space. It realizes learning anytime and anywhere; Secondly, it is a supplement to school teaching (Pang, 2001). Most students' problems in class can be solved by online learning after class. Finally, the knowledge on the network is more abundant. The student obtains this knowledge the channel to be more convenient. The cost is low, especially during the outbreak of COVID-19, when schools were unable to resume classes. Most students were able to gain knowledge and answer various learning questions through Online Active Learning Activities. It is obvious that online learning has many advantages. If students can take the initiative to use online learning, their knowledge system has enriched. The object of this study is the English writing skills of Chinese higher vocational college students. If they can make up for their lack of English writing skills by taking the initiative to study online, then their English writing ability will get a particular enhancement.

English writing is one of the aspects of English learning, which plays a vital role in practice of English writing and the consolidation of English grammar knowledge (Brophy, 1987). In English proficiency tests, such as CET-4, English writing accounts for 15% of the total score. Students are required to complete the essay and write in about 30 minutes. The required content should be more than 120 words (Sheng & Wang, 2005). According to the characteristics of cognitive ability development of Chinese higher vocational college students and the needs of vocational skill development, the English curriculum in higher vocational colleges emphasizes: "Based on further development of the students' comprehensive language application ability, it is important to improve the students' ability to acquire information, handling information, analyzing and solving problems in English, especially the ability of thinking and expressing in English." Based on this goal and requirement, the ultimate goal of English teaching in higher vocational colleges is to cultivate students' listening, speaking, reading and writing skills (Jin, 2005). From the above four aspects, listening and reading are comprehension skills, speaking and writing are expression skills, in contrast, writing is the creative use of language, it is usually accompanied by the use of various cognitive activities and strategies. The level of writing ability, to a large extent, reflects the students' English ability comprehensively (Zimmerman & Bandura, 1994).

At present, China is playing a more and more critical role in international society as politics and economics develop. More and more attention has paid to the English writing skills of higher vocational college students. Based on a systematic study of the

relevant literature, the author finds that in recent years, Chinese higher vocational college students' writing skills become vital in CET-4. Their writing scores are higher in CET-4 (Cheng & Zheng, 2008). But for a long time, the English writing skills of vocational college students have been weak. Overall, the current English writing skill of Chinese higher vocational college students is relatively lacking. (Zeng, 2004). And then, Chinese higher vocational college students' motivation to learn English writing is narrow. The cause of Chinese higher vocational college students to learn English writing is mainly to cope with the examination rather than master it as a necessary skill. Once the task is over, the motivation to learn disappears. It is of great practical significance to study the strategies for improving vocational college students' English writing skills. It is well known that, although writing and speaking are expressive and output skills, the report does not help people to express their thoughts through situations, expressions, gestures, or direct face-to-face feedback in the same way that oral communication does. At the same time, English writing needs some time to deliberate the words, which makes the dishes more precise, the sentences more complex, the expression forms more diverse, showing the different characteristics and styles of the written language. In addition, English writing requires a certain degree of complexity and level of speech, so it is the most challenging ability for Chinese higher vocational college students to master.

There are three reasons for the lack of initiative in English writing learning in some Chinese higher vocational college students: 1) Students' lack of awareness of Active Learning. Higher vocational colleges pay less attention to cultural education, especially English learning, and more accept cramming teaching for examination. In this case, the student's learning goals are not clear. They cannot mobilize their learning enthusiasm. Therefore, many students of Chinese higher vocational colleges have a poor performance in their English achievement. Most of them start learning English since they enter the Higher Vocational College. Learning difficulties occur in higher vocational education because of the students' weak English foundation and unsuitable learning methods and learning habits. After three years of strenuous study in high school, some students have not entirely left the indoctrinated study mode of high school and have no awareness and strategy of self-study. This kind of inertia thinking affects the practice of Active Learning. At the same time, higher vocational college students have to learn and master English language skills for specific goals. In addition, Chinese higher vocational college students have poor self-control ability. They often feel at a loss in the face of various rich English learning resources on the Internet. When they choose to learn resources blindly and arbitrarily, this will affect their attention to other entertainment resources, and so on. 2) Students' ability to take the initiative in learning was inadequate. The English language of Chinese higher vocational college students is highly scarce. When it comes to English writing, there are very few English words to use, which results in insufficiency in writing content. The English language accumulated by vocational college students is relatively simple and not beautiful enough, making them get lower marks in the English test. In addition, Chinese higher vocational students lack effective learning methods. Although some students are willing to learn English and register for some English tests, their English writing ability can be improved with good learning strategies. 3) Lack of autonomy in school education. The initiative is an essential reflection of students' learning ability and teaching goals. After students form the habit of Active Learning, they will consciously change from passive learning to Active Learning.

Then improve their functional learning ability (Zhong, 2001). However, at present, English study time in Chinese higher vocational colleges is little, and many English teachers only focus on teaching English knowledge and students' passing rate. However, the cultivation of students' Active Learning skills is also one of the objectives of English classroom teaching. In curriculum design and classroom implementation, students' emotional needs are not taken into consideration by teachers, and students' Active Learning ability is not actively guided by them too. The use of modern information teaching means does not play the role of creating the situation, so it cannot play the role of students as a cognitive tool of Active Learning and collaborative inquiry.

Today, there are several main types of writing about English. There are several types of English writing: 1) Narration. Narratology is a kind of literary form that mainly records people, narrates, narrates scenes and objects, and primarily describes the experiences of characters and the development and changes of things (Benson, 2001). 2) Argumentation. Also called argumentative writing, is a kind of writing style for analyzing things, discussing matters, expressing opinions and putting forward ideas (Waterhouse, 1990). By presenting facts, reasoning and distinguishing between right and wrong, the author determines whether his views are correct or wrong and sets up or denies a specific proposition. Argumentative writing should have clear ideas, sufficient arguments, concise language, reasonable argumentation and strict logic. 3) Exposition application. Practical writing is a style of writing formed in the long-term social practice of human beings (Bymne, 1998). It is the time when state organs, political parties, social organizations, enterprises and institutions deal with various matters in their daily work and life, a well-formed style of writing consists of clarity, communication, faithfulness, and conventionality (Little, 1991). 4) Description. Expository writing is a style in which expository writing is the main form of expression (Ellis, 1994). Thus, people can have a scientific understanding of the structure with relevant knowledge.

Here is one course to improve their English writing skills: vocabulary. It is evident that in English writing scoring, teachers pay a lot of attention to some advanced vocabulary expressions (Holec, 1981). Therefore, it is necessary to increase the vocabulary and phrases accumulated through memorization, writing, reading aloud, watching videos and other forms. Vocabulary is the basis for carrying out English writing, and a rich vocabulary provides the foundation for laying the foundation for students' writing (Paul & Juliane, 2004). Especially the use of advanced vocabulary can significantly improve students' English writing, and get higher English writing scores. In addition, the accumulation of vocabulary is also robust for English reading and can improve students' English skills as a whole (Zimmerman, 1994).

Vocabulary is essential for English writing. The accuracy of vocabulary can make the English essay more accurate and professional. In the test, it is easy to find that the examiner pays much attention to the repetition of words, so it is necessary to prepare some replacement words. The variety of vocabulary is a good reflection of one's English level. For example, to express the phrase "solve the problem", we can say solve/cope with/deal with/tackle/address/combat the problems/issues. When using replacement words, pay attention to the precision of the words used doesn't necessarily want to see how many rare and difficult words there are in an essay. Still, the use of some words and their substitution does bring unexpected embellishment. To sum up, vocabulary is the

foundation of an essay. Just like building a house, vocabulary is the cornerstone of a house.

Therefore, the current study aims to research how to develop Online Vocabulary Active Learning activities to improve vocational college students' English writing ability in China.

1.2 Research Objectives/Questions

1.2.1 Research Objectives

1. To design non-native speakers' Online Vocabulary Active Learning activities in English writing skills in a higher vocational college.
2. To compare pre test and post test score of students' English writing learning achievements.
3. To investigate the satisfaction of Chinese higher vocational college students with their online vocabulary Active English writing Learning Activities.

1.2.2 Research Questions

The questions are as follows:

1. What do non-native speakers' Online Active Learning activities for English writing Skills look like in a higher vocational college?
2. Is there any significant difference between pre-test and post-test scores of Online Active Learning activities in English writing achievement by learning items before and after class?
3. What satisfaction of students who study by Online Active Learning Activities?

1.3 Conceptual Framework

Active Online Learning English writing activities are the independent variables, while English writing achievements and satisfaction are the dependent variables. The relationship between the two is that the Online Active Learning Activities of English writing may improve students' English writing performance and students' satisfaction with the implementation of the activity. The former may lead to changes in the latter. If Online Active Learning Activities of English writing are insufficient or ineffective, it may affect students' English writing scores and students' satisfaction with the implementation of the activity.

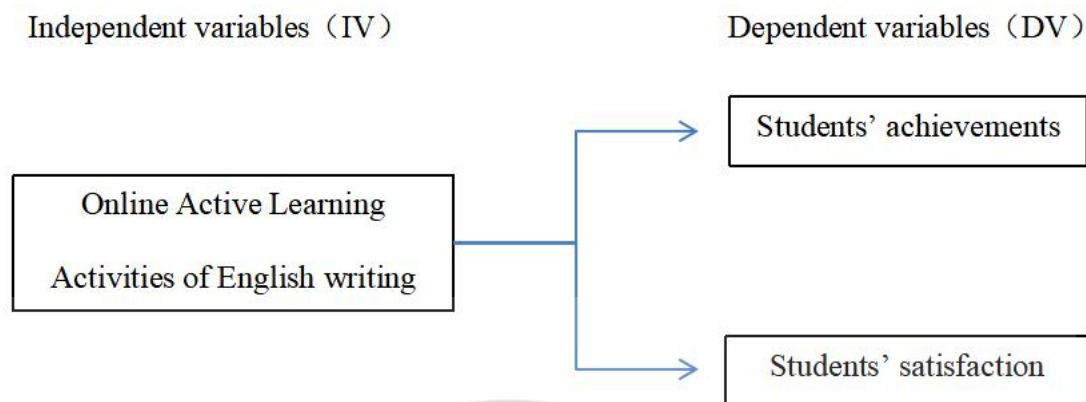


Figure 1.1 Conceptual Framework

1.3 Scope of the Study

The current study investigates the achievement of Online Active Learning Activities in teaching English language to first-year non-English primary students of a Higher Vocational college in Zhe Jiang, China, and investigate their satisfaction degrees.

In addition, students in higher vocational schools are mainly technically oriented and specialized. For example, automotive technology, culinary, nursing, high-speed railway crew, etc., each has its technical terminology expression within the profession. So technical English vocabulary learning is also the main scope of the study.

1.5 Definition of Terms and Conceptual Framework

Definitions of terms of this study are as follows:

Online Active Learning: Active learning means that students learn independently. The active learning method is that students acquire the knowledge they need through all reasonable means. Online active learning refers to the ability of students to use the Internet and actively acquire relevant expertise without the need for a teacher or parental supervision. Online Active Learning Activities is the same as Active Learning. It is a self-regulated, self-managed, and self-monitored process, and this learning is valuable and meaningful learning that the learner is continually constructing. Students' timely and effective scheduling of online learning time and perception or prediction of learning outcomes guides a planned approach to learning.

English Vocabulary: refers to the English vocabulary accumulated by students through daily learning and memory. When students study English, they can know all the factors and pronunciation traditions. It is also possible to master all the grammar and rules, but it is impossible to learn all the words. Even people who speak English as their mother tongue cannot achieve this goal.

English writing skill: refer to the student's ability to form an English essay by combining vocabulary and phrases in a standard grammatical structure, with each paragraph interconnected. English writing skills need to be enhanced through vocabulary building, Active Learning, and other courses.

Satisfaction: refers to students' evaluation and perceptions of learning activities, and this paper refers to an assessment of students' activities after their active online English writing learning.

Achievement: refers to student teachers' evaluation and test scores in a broad sense. To facilitate the study, the English writing rates of the students in Chinese higher education institutions studied in this paper are expressed in the form of scores.



CHAPTER 2

LITERATURE REVIEW

This chapter reviews the literature and research on Active online vocabulary learning activities to improve vocational students' English writing skills in China. It is divided into seven main areas: (1) Online Active Learning Activities; (2) English writing skills; (3) vocabulary learning; (4) achievement; (5) satisfaction; (6) related theories; and (7) research in China and other countries.

2.1 Online Active Learning Activities

2.1.1 Importance of Online Active Learning Activities

Students can enrich their knowledge through Active Learning Online. Knowledge on the Internet is wealthy. The network contains very high-quality teaching resources inside. To promote the deep integration of modern information technology and education teaching, China is now planning to build 3,000 national high-quality online open courses and about 1,000 national virtual simulation experimental teaching projects. These are good courses by good teachers carefully organized, cultivated and selected by the education sector. They can guarantee the quality, which can serve as an expanded part of students' knowledge system (Hasan & Roy, 2015).

Students can gradually develop the habit of Active Learning by using quality online learning resources through Online Active Learning Activities. The development of practices has a lifelong impact on students and improving their self-control. Because students do not make progress without the development of Active Learning Skills, practical learning skills are also the primary learning style that individuals adopt when they enter and leave school. Without functional learning skills, lifelong development is minimal (Ma & Wang, 2016).

2.1.2 Ways to Improve Online Learning Initiatives

With the depth of research, many scholars realized the deficiencies of students' independent learning ability in online learning. They started to study methods to enhance students' Online Active Learning Activities ability. Proposed guidance methods beginning from the resource environment, such as teacher guidance. He argued that students need a teacher and parental supervision and diversified assessment during online learning (Carr & Hage, 2015).

Weike designed a personalized recommendation system for online learning resources based on collaborative filtering technology, aiming at improving their Online Active Learning Activities efficiency (Shan, Zhang, Hang, & Weike, 2019).

There are also suggestions for improvement from the perspective of course design. Kriminger, E gave tips for designing Active Learning methods for online courses by analyzing the internal factors and psychological mechanisms that affect Active Learning

online in three dimensions: learning motivation, information processing ability and cognitive strategies. However, most of these methods are, theoretical studies are not put in practice. The effectiveness of the system needs to be further examined by scholars (Kriminger & Principe, 2015).

2.1.3 Strategies for Successful Online Active Learning Activities

To improve students' Online Active Learning Activities, Palaniappa Manickam suggests that students should be the primary focus to promote effective advancement of Online Active Learning Activities in three areas: Online Active Learning Activities awareness, self-control and self-planning skills, and communication and evaluation (Palaniappa & Kamala, 2016). As it is shown in Figure 2.

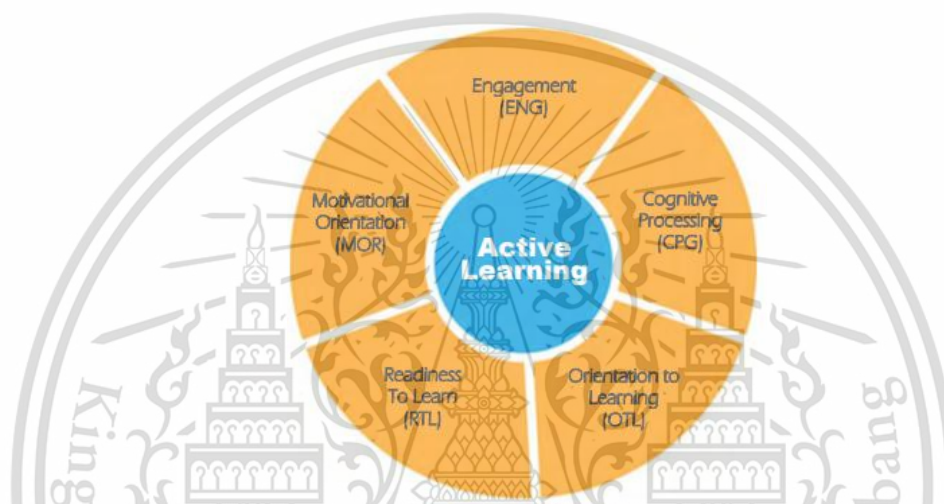


Figure 2.1 Active learning conceptual model

First, increasing students' awareness of Active Learning online. Goal-setting theory suggests that setting goals are motivating and can transform human needs into motivation, and adjust the results of their learning behavior against the set goals in time to make corrections. In current online learning, students' Active Learning consciousness is poor. Their motivation is insufficient, mainly because of unclear learning goals. Students can understand the study guide and learning tasks with the help of teachers and carry out Active Learning online with clear learning goals.

Second, improving students' self-control and self-planning ability. Divided at the level of learning strategies, self-planning and self-monitoring both belong to time management strategies in learning resource utilization strategies. To accomplish learning goals, self-directed learners need to manage their time for learning, properly arrange their learning time while monitoring their learning process. Therefore, self-planning and self-monitoring are not only Active Learning abilities but also Active Learning strategies. Suggested in improving secondary school students' time self-management skills that students' time management skills can be enhanced by the method in three steps. In the first step, students are made aware of their current time use. Second, students are asked to discuss how they would like to use their time. Again, ask students to create a weekly time use plan and evaluate their time use at the end of the week. Finally, students are asked to

report whether they had successfully used this new time management strategy (Sun & Gao, 2017).

Third, enhance communication with students and give them diverse assessments. In current online learning, students feel more helpless when they actively learn before class, encounter difficulties without help, and do not know how to ask or dare to ask themselves. Social constructivist theory suggests that only through non-stop discussion and negotiation with peers can individuals break through the limitations of individual understanding and construct and understand knowledge at a deeper level. Thus, to help students improve their ability to use the social environment and reduce their sense of helplessness, it is necessary to provide them with channels for discussion and communication. We also advocate that students self-evaluate their learning effectiveness through post-lecture reflection, evaluate their learning outcomes based on their learning goals, and reflect and summarize to improve their Online Active Learning Activities ability next time.

This subsection firstly introduces the importance of Online Active Learning Activities, mainly in terms of enriching students' knowledge system and students' future development; secondly, it analyzes the methods to improve students' Online Active Learning Activities, included three aspects of environment creation, digital technology and course design; finally, it discusses the successful experience of carrying out Online Active Learning Activities, pointing out the need to improve students' awareness of Online Active Learning Activities, to Finally, the successful experiences of Online Active Learning Activities are discussed. It points out that it is necessary to raise students' awareness of Online Active Learning Activities, improve students' self-control and self-planning ability, strengthen communication with students, and give them diversified evaluations. In summary, this section extends the main focus of Online Active Learning Activities to point out its importance and the methods and strategies to improve Online Active Learning Activities.

2.2 English Writing Skill

2.2.1 Importance of English Writing Skill

English, as a compulsory course in colleges and universities, after the abolition of the English proficiency level 3 exam, English learning is more demanding for students, and students need to take the English level 4 exam, English writing is an essential part of testing students' English proficiency level, and students with good English writing skills can improve students' English exam scores and inspire students' confidence in learning English at the most direct level (Dumitrescu & Ioana, 2015).

2.2.2 Methods to Improve English Writing Skills

1) Enhance the reading volume (Mallia, 2017). Read more good masterpieces, short articles and English news to increase the reading volume and improve the sense of English, which helps to provide ideas for English writing.

2) Learn to imitate excellent model essays (Teng, 2021). For some daily perfect English writing models, you can first imitate their writing style, and fully understand the writing style and skills of perfect English models, which is an excellent way to improve.

3) Strengthen the consolidation of grammar knowledge (Liao, 2016). In the process of writing, it is not only necessary to ensure the smoothness of writing statements,

but also more essential to pay attention to the correctness of grammar knowledge, so the learning and understanding of grammar knowledge is also an crucial point.

This paper focuses on vocabulary-based learning to explore the writing skills of Chinese higher education students to improve their English through vocabulary learning because vocabulary is potent to enrich the aspect of English writing and helps students read English articles.

2.2.3 Successful Experiences Of English Writing Learning

Oskar-Poisson, C. A pointed out three primary strategies that improved students' English writing skills mainly from students' active ability, and argued through an experimental method, which achieved good results in English writing learning in a university (Oskar-Poisson, C. A.,2017)).

First, it shapes the culture of online learning and optimizes the psychology of learning. Second, English writing skills of students are improved through English vocabulary learning.

This section first points out that good English writing skills can improve students' English performance, provide them with more options for their future career development, and give them more opportunities for growth.

2.3 Vocabulary Learning

2.3.1 Importance of Vocabulary

English vocabulary is an essential part of English learning and it has great significance in improving students' overall English proficiency. Vocabulary learning always runs through the whole process of English learning. Vocabulary teaching is an essential part of English teaching, and it is the key to the success or failure of English learning (Lifang & Department, 2018).

2.3.2 Vocabulary Ability

Vocabulary competence is the ability to automate the use of terms in natural communication (e.g., reading, conversation) (Aziz & Sulicha, 2016). In other words, it's the number of words mastered. The more words and vocabulary you master, the more relaxed you will be when communicating, and you can choose expressions that are more in line with the other party's language habits.

There are currently three ways to export language.

- 1) Appreciation of discourse: by analyzing the words of the lesson you read, you improve your understanding of the words and thus promote your ability to apply them.
- 2) Use the language learned to write language stories, or to write on topics.
- 3) Try to use their newly learned words in daily oral communication.

Overall, to improve your language level, you must strengthen your language skills (Yang, & Dixon, 2015).

And the ways to strengthen language skills are.

- 1) Consolidating commonly used language, words that are cognitive will be deepened in memory after constant use.
- 2) Learning new language, writing is sure to encounter recent events that will not be described. This time can be accessed and then written into the essay, in the process of accessing information can help accumulate a lot of functional languages (Liu, 2016).

3) Strengthen the logic and take up. English writing training can be more English diary. A diary may seem simple, but in the process of describing the event, you can increase your narrative ability and clarify your thinking.

2.3.3 Level of Vocabulary Ability

There are three main ways to improve the level of English vocabulary skills.

1) Use various flexible and colorful methods to learn with the book as the center. English vocabulary learning mostly comes from the book. The classroom should allocate sufficient time to learn vocabulary, phrases and collocations with the most straightforward and most relevant examples, so that students can spend a certain amount of time reading aloud and memorizing the text every day to master the usage of words and remember the grammar of the text, which also facilitates English writing. At the same time, we should use flexible and varied methods of learning and create a colorful vocabulary learning environment by using sounds, movements, expressions and dramatic performances to make students enthusiastic about learning vocabulary.

2) Use English vocabulary memorization methods. Learning to use various memory methods, such as spelling memory, associative memory, collocation memory, phonetic memory and other methods of vocabulary teaching, making full use of video, audio, slide and other forms of modern teaching equipment, repeated practice, constant correction, students should have more time to practice pronunciation, imitation, to achieve the ultimate accurate pronunciation of the purpose. Phonetics is the basis of vocabulary existence and lays a good foundation for vocabulary teaching (Lazuardin, 2016).

3) Create a lively and exciting vocabulary environment. You can have various forms of practice such as teacher-student dialogues, students asking each other questions and group discussions, so that students can master, review and consolidate vocabulary in practice.

To sum up, the three group of vocabulary proficiency are analyzed: vocabulary size, vocabulary expressiveness, and vocabulary writing ability. Vocabulary is of great significance to English writing. Vocabulary and expression are the basis of vocabulary writing ability, while vocabulary writing ability directly affects English essays.

2.4 Achievement

2.4.1 Ways to Improve English Writing Achievement

First, students need to understand what types of English writing questions are available on English papers (Olson & Farkas, 2017). The current types of English writing among the English level exams for college students in China are mainly looking at pictures to write essays, writing in English around a theme, and so on. Targeted training is carried out based on understanding the relevant topic types.

Secondly, students should improve their control time for each topic (Amir & Hadi, 2016). Because English essays are mainly among the last items of English exams, students must leave enough time to write in English. This requires students to allocate the time for each category of topics rationally and to ensure the integrity of the English writing time based on rational planning.

Third, language, as mentioned before, is the foundation of English writing (Koross & Okwach, 2015). Students must continue to accumulate English vocabulary in

their daily study to ensure that they can have content output in their English writing; in addition, to achieve higher speeds in English writing, students must also accumulate some advanced English vocabulary to increase the highlights in their articles. In addition, to achieve high rates in English writing, students must also get some advanced English vocabulary to add highlights to their essays.

Fourth, the time for learning English writing in class is limited, which requires students to use their break time to keep learning English writing. Especially for students in higher education institutions, active English writing learning is more essential (Toivainen, & Kovas, 2021).

Fifth, improve your English writing performance by learning vocabulary. One is to memorize vocabulary, which can be done cleverly for example, making sentences with new vocabulary or making up stories with a group of words or expressions. The second is that students themselves improve the initiative of vocabulary learning. Students use their time after school to learn vocabulary on app software or by watching videos.

2.4.2 Measurement of Achievement

(1) Scoring of English writing scores

Achievement includes the performance received from teachers and parents about students' English writing and the related presentation of scores (Adaros & Esperanza, 2017). To ensure the operationalization of the dissertation study, the criteria for good or bad performance in English writing in this paper are mainly judged by the scores of English writing performance. The total score of English writing grade was taken as 15 points, and the rates were divided into six rates: 13-15, 10-12, 7-9, 4-6, 1-3, and 0 (Budiman & Rahmat, 2015). The scoring scale for each grade is shown below.

1) 13-15 points. Tangential. Expression of ideas is clear, well-written and coherent, essentially free of linguistic errors, with only a few minor errors.

2) 10-12 marks. Relevant to the topic. Clearly expressed ideas, coherent text, but a few linguistic errors.

3) 7-9 marks. Basically, to the point. Some parts of the essay are not clear enough. The text is barely coherent; there are many linguistic errors, some of which are serious.

4) 4-6 marks. Basically, to the point. The expression of ideas is not clear and poorly coherent. There are more serious linguistic errors.

5) 1-3 marks. Poorly organized, disorganized, fragmented vocabulary or most sentences have errors, most of which are serious.

6) 0 points. No answer, or only a few isolated words, or essay not related to the topic.

In addition, we can also judge whether students' English performance has improved by considering whether their English has been enhanced through the China Higher Level Public English Level 3 exam. The total score for this exam is 100 points, with 60 points passing. The standard score for English writing is 20 points, and the usual time is 30 minutes.

(2) Measurement of English vocabulary learning performance

English vocabulary learning performance can be examined by multiple-choice questions. In Chinese exams, multiple-choice questions mainly focus on English vocabulary and vocabulary phrases. The students' choices can show their mastery of English vocabulary. Teachers can set their questions and attach scores to each sub-test to analyze students' vocabulary mastery through their total scores.

2.5 Satisfaction

This subsection introduces ways to improve English writing performance, mainly around test papers, targeted training based on understanding the design of test paper questions as well as building vocabulary, active English writing learning, and so on. Next, the criteria for measuring performance are introduced. The English writing score is set at 15 points and discussed in detail.

2.5.1 Ways to Improve Student Satisfaction

Improving students' satisfaction mainly lies in the fact that the relevant learning activities match students' interests (Gibbons & Perkins, 2015). Web resources can transform abstract English knowledge into creative and concrete content and present students with a colourful learning atmosphere through pictures, text, and videos, which not only attracts students' attention but also enhances their interest in learning and desire for inquiry, prompting them to actively and independently participate in English learning (Gray & Diloreto, 2016). When students are confronted with novel and interesting online learning resources, they will actively participate in learning, deepen their impressions and memories of English knowledge, mobilize their various senses, and improve their learning abilities. Using online resources creates a relaxed, pleasant, democratic, free, harmonious and equal education atmosphere for students to express their ideas and opinions on time. Then the teaching is launched to suit their needs (Rafael, 2017).

The second is to conduct learning activities that allow students to progress through the learning activities (Dziuban & Hermsdorfer, 2015). This requires the design of English writing learning activities to be relevant, personalized, and effective in obtaining a transformation in English achievement through student initiative. Students gain a sense of accomplishment and, therefore, increase their satisfaction.

2.5.2 Measurement of Satisfaction

Satisfaction is more abstract, so this paper uses a "five-segment" approach, dividing pleasure into five parts: delighted, relatively satisfied, average, reasonably dissatisfied, and very dissatisfied, and analyzes the overall satisfaction index through different students' choices.

On the other hand, satisfaction was measured through indirect methods, because people's attitudes are measured by their actions or reactions to things. Through their actions or reactions to things. An example of measuring using this method is an example of measuring attitudes utilizing this method is observation. In the current study, it is the observation of the studied students' attitudes, initiative, etc, towards learning English writing online.

This subsection introduces the need to design learning activities that motivate students and increase their sense of accomplishment to improve student satisfaction. It also points out two methods to measure student satisfaction, the scale method and the behavioural observation method.

2.6 Relevant Research

2.6.1 Related Studies in China

Ma (2015) conducted a four-month experimental process by dividing four classes of a university into four groups of subjects. The experiment was born the mode of comparing the experimental group with the control group using a questionnaire. The focus was on recording the linguistic quality (vocabulary collocation, grammatical structure and chapter structure) of the experimental subjects' English writing before and after the experiment. Then data analysis was conducted through the Social Science Data Package to analyze whether there were significant differences in the performance of the experimental and control groups before and after the experiment. This study confirmed the feasibility of implementing Active Learning among university students.

Xu (2016) similarly studied the frequency of Active Learning strategies carried out by 420 sophomore students through a survey method and analyzed the impact of Active Learning on English writing. The final out findings additionally showed that Active Learning strategies had a significant effect on English writing and there was a significant positive correlation between this impact and students' English writing performance. Also, there is a significant positive correlation between the use of Active Learning strategies and students' English writing performance. There is a significant positive correlation between Active Learning strategies and the impact of students' self-assessed independent learning strategies on their English writing.

Han (2016) In the course of the experiment, the author did an investigation of the effect of the English grading scale on students' English writing performance and ability with the help of English teachers in two classes that lasted for three semesters. It was found that the use of grading criteria by students in the process of English writing in higher education institutions was almost non-existent, and to a certain extent, the role of grading criteria in daily learning to assist students' English writing in higher education institutions was ignored.

Li (2020) explored the causes of these writing errors by clearing, classifying and counting the writing errors in a sample of 240 student essays, and used them to give corresponding suggestions for personal English writing and English teaching. It is argued that the factors that directly affect students' performance in essay are: first, whether students are interested in English writing, whether they find it easy and whether they think it is necessary to do English writing. Secondly, whether students feel they have an extensive vocabulary, whether they are comfortable with grammar, whether they have less Middle English, whether they can polish and embellish their writing, and whether they have something to say and know how to express it in English when writing finally, whether the students can review the topic before outlining, whether they can consider the words and sentences in their writing, and whether they can translate English with English thinking.

2.6.2 Related Studies in Other Countries

Kim (2020), in a study, investigated the standard English vocabulary errors in Kazakhstan and Russia as first vocabulary. Thirty-two participants took part in the survey. After analyzing their spelling errors, the researchers found that the seven most common errors were subject-predicate agreement, singular and plural, misspelling, misuse of articles, misuse of prepositions, and spelling. This study, such as the misuse of verb

forms, could give educators insight into how to take advantage of these errors when writing materials.

The empirical study by Hone & EI (2016) found that the effectiveness of online course content and instructor interaction has a significant impact on whether students can complete the course same as the perceived usefulness and ease of use of the individual dimension of higher education students, online classroom interaction, and system quality and innovative features of the online education platform dimension all indirectly affect online learning behaviour through attitudes toward use.

Zhou (2016) used Theory of Planned Behaviour (TPB) and Self-Determination Theory (SDT) to integrate the research framework and found that attitude and Perceived behavioural Control (PBC) were the key factors influencing higher education students' active use of online learning platforms.

Mogavi (2021) explored the influencing factors and countermeasures of online education platform users' continuous learning behavior based on the Technology Acceptance Model (TAM) and Expectation Confirmation Model (ECM), where course satisfaction, perceived usefulness, and users' habits all indirectly influence users' willingness to learn online and ultimately affect their continuous learning behavior online.

Mohamad (2019) developed the Survey of Academic Self-regulation (SASR) based on the examination of existing questionnaires (including the two described earlier). Dugan based on the structural framework of affective, cognitive, and self-regulation. The questionnaire was divided into several subscales, including five subscales related to affective factors, four subscales pertaining to self, and five subscales related to self-regulation skills.

Weike (2019) argued that online collaborative learning tools can enhance blended learning environments and provide high-quality online learning opportunities. Quality online instructional design can improve the effectiveness of composite learning. A blended learning concept that emphasizes Active Learning, integrates multiple learning resources, uses information technology as a communication medium, combines formal and informal instruction, introduces live and non-real-time methods, and takes advantage of online and traditional teaching is more conducive to students' development of Active Learning behaviors online.

This subsection presents active online English writing learning in China and other countries. It includes online English writing learning standards, the relationship between Active Learning and English writing performance, and more. According to the research results of foreign scholars, it can be known that the effect of active learning of foreign students is not very good, so how to train students to carry out active learning is also an urgent problem in foreign countries, which also reflects the significance of this research.

2.7 Summary

The results of this research should be very worthy of analysis. A complete training program can be formulated according to the different states of students in different experimental stages. This result can provide scholars at home and abroad with some thinking and suggestions on active learning.

CHAPTER 3

RESEARCH METHODOLOGY

This section focuses on the study design, participants, study instruments, study materials, study procedures, and data collection and analysis.

3.1 Study Design

The overall research design was divided into three parts: a pre-test, a post-test, and a questionnaire survey.

The pre-test relates to the initial measurement of the English writing level of students in Chinese higher vocational colleges by using Rubric (<http://rubistar.4teachers.org/index.php>) and essays before starting the experiment. (Rotella & Cain, 2016).

The post-test has the same question type as the pre-test by using Rubric (<http://rubistar.4teachers.org/index.php>) and essay, to better compare the level of students before and after the test.

The pre-test and post-test were measuring the achievement of the students.

In addition, a questionnaire finds out the students' satisfaction with the Active Learning activities conducted in the vocabulary category.

3.2 Participants

The target population is 180 first-year students in Zhejiang Vocational College (6 classes). First, the researchers determined that all classes had students with grades from high to low. Then 30 students are randomly selected from one of the 6 classes. These 30 students served as the participants in this study by using cluster sampling technique, and implemented online active learning activities of all English writing skills for them. The experiment was conducted with the consent of the 30 students and their parents.

3.3 Research Instruments

Part A: Pre-experiment

1. Develop the Active Learning Activities plan

Between the pre-test and post-test, the lesson plan conducts a teaching experiment for students.

During the training process of vocabulary learning strategy, the students in Experimental Class are required to write three compositions periodically, that is to say, the students write one composition after the training of vocabulary learning strategy around every four weeks because the whole term only lasts about 16 weeks. Therefore, at

the end of this term, these three assignments could be considered as an instrument for students' vocabulary learning strategy training in EC. The pretest and post-test are about English writing skills and vocabulary application. There are 30 multiple-choice questions. In the questionnaire, the first part is about participants' basic information and vocabulary learning methods, the second part is about students' attitudes towards online active vocabulary learning, and the third part is about opinions and suggestions.

Meanwhile, the topics of three assignments are chosen from the same testing materials PETS-3 papers in order to ensure the accuracy of this experiment.

The purpose of employing three writing tests as research instruments is to gain relevant data about the results of students' writing competence in both EC and CC before, during and after the performed experiment. The writing tests contain three parts, pre-test, mid-test and post-test, which aim at comparing whether students' English writing ability is improved or not after the vocabulary learning strategy training. These three tests were conducted to make the subjects in both EC and CC write three compositions edited from PEST-3 about 120 words in around 30 minutes. And the whole score of these tests is 20 points. While taking these tests, all the subjects in EC and CC are designed to sit according to their student number.

2. Validated the content in Active Learning Plan by expert interview

The researcher created the lesson plan based on applying online activities to teaching English writing. This lesson plan was designed for four weeks and approved by the researcher's advisor and three experts in the field.

The researcher ran the class based on the lesson plan. The students were taught English writing through active learning activities for four weeks. After that, they were assigned to complete both post-test and questionnaire.

The test time was approximately thirty minutes.

3. Validated Pre-test post test questions Prior to conducting the main study, eliminate confusion and ambiguities of wording. This study invited three experts: two English teachers and one educational technology expert to verify by using the Index of Congruency (IOC), to test congruency and content validity of pre-test, post-test, and questionnaire in satisfaction.

Evaluation criteria are used to check the consistency between objectives and test items, as follows:

+1 = the test item is considered to be consistent with the goal.

0 = the test item is considered neutral in terms of whether the test item is consistent with the goal.

-1 = the test item is considered to be inconsistent with the target.

For acceptable data, the total average score of the project objective consistency (IOC) index is higher than 0.5.

4. The experimental overview

The experiment will be implemented in the new semester in February. At the beginning of the experiment, the writing scores of the latest month exam in the experimental class and the control class were collected as the result of the pre-test. The scores of the two classes were analyzed respectively, and the result of the analysis showed that students' English writing ability of the two classes had no big difference. In the experiment, students were required to make a self-evaluation after they finished their writing, then to make peer evaluation among their classmates; teachers would evaluate

their writings after they handed in lastly. At the end of the experiment, writing scores of the end term exam were collected as the results of the post-test. And to compare them with previous data to see whether the experimental class made a significant progress.

In order to understand the change of students' interest, strategies and proficiency in English writing before and after the experiment, questionnaires were also used before and after the experiment. In addition, the students of the experimental class would make their writing portfolios under teacher's guidance and learn how to use it in the writing evaluation process. Here are the main parts of this experiment: experiment preparation, experiment implementation and post-experiment stage.

Experiment Preparation Stage

Before the teaching experiment was actually carried out, the writing scores of their first month test were collected to provide basic information about students' writing ability in the control class and experimental class. Then all the scores were analyzed by SPSS 17.0 to see whether the two classes meet the conditions for the teaching experiment. Then, the questionnaires were handed out to students in the EC in the self-study class under the guidance of the author. By analyzing the data got from the test, it is found that there is no obvious difference in writing proficiency between the control and experimental class, so the classes meet the requirements to conduct the experiment.

The assessment tables and the scoring standard were also designed in this period. Besides, the students in the experimental class were divided into groups of 6 persons. In this way, the teacher could observe the performance of each group separately.

Part B: Experiment

1. Perform Experiment

The pre-test is the same as the post-test, mainly for testing English writing skills.

The steps of the pre-test and post-test of English writing skills are as follows.

Step 1: The researcher selects tests relevant to the main body of the paper, and that could accurately reflect the students' English writing skills. The researcher selects English essays from the reports of the English III examinations (2019 and 2020) in Chinese higher vocational colleges the test content.

Step 2: During the exam of the English essay on the English III exam paper of the Chinese Higher Education Academy, it was found that the English essay was divided into two pieces. Each essay scored 10 points, for a total of 20 points. The scores of the English essay directly reflect the writing ability in English. There is significant consistency between the two without the need for testing.

Step 3: Pre-test and post-test were administered to these 30 students to compare the pre and post-English writing scores of these 30 students.

2. Study satisfaction

The questionnaire was used to test students about their satisfaction with the implementation of English writing learning activities, and was divided into the following steps (Perez, L., 2017).

Step 1: I investigated 30 students' basic personal information, including their primary, ages, genders, etc.

Step 2: We specifically study students' satisfaction with the implementation of the activities. The satisfaction level was divided into 1-5 levels. The overall indicators of satisfaction were analyzed by different students' choices.

5=Very Satisfied

4=Satisfactory

3=Fair

2=Unsatisfied

1=Very dissatisfied

Step 3: I designed an open-ended question in the last part of the questionnaire, to investigate students about students' suggestions for conducting English writing leaching activities, etc.

Experiment Implementation Stage

The researcher selects English essays from the reports of the English III examinations (2019 and 2020) in Chinese higher vocational colleges the test content. This kind of writing content can help students to review what they have just learned. According to the study of writing time and individual differences on writing results (Zeng, 2011), the writing task was given to the students a week before for them to have enough time to prepare for the first draft. The last draft was permitted to hand in the next day for them to have enough time to write to make the whole writing process more fare to most students.

There were six topics altogether. Since the text books were designed according to the students' current cognitive development stage, so it was better to choose writing topics in their text books. Table 1 shows the composition writing time.

Table 3.1 Writing Time and Writing Materials

Topic	Time
1. Welcome to My Hometown	5 th week
2. Life in the Future	7 th week
3. A Letter to the Manager	9 th week
4. My Favorite Scientist	11 th week
5. I have a dream	13 th week
6. Learning Difficulties	15 th week

In the following writing lessons, two classes were taught with the same learning materials, the same writing approach by the same teacher. But different assessment methods were adopted to assess the students' writing products in the two classes. That is to say, for the experimental class, online vocabulary active learning activities was employed in the whole experiment process, while the traditional summative assessment was used in the control class without any further assessment, which meant that the teacher would assess the students' compositions after they completed and handed them in. They were required to write 8 compositions, including those in the pre-test and post-test. The specific steps of the whole experiment procedure in the experimental class were presented as follows:

Step 1: As the students had seldom known the concept of FA, the author explained the idea of FA and portfolios. And put up the requirements of establishing students' own portfolio. Then the scoring standard was present to let students form the foundation of assessing compositions. And then the teacher chose a piece of writing from

the pre-test and led a discussion about “what makes a good composition” based on analyzing the writing collaboratively.

Step 2: After the experimental class understood the online vocabulary active learning activities, a writing assignment was given to students in both classes. In the experimental class, students were required to discuss the topic with their group mates and plan for their own compositions.

Step 3: The writing task was given by the teacher after the students had discussed about the topic thoroughly. As the time was limited, students were required to finish the compositions after class.

Teaching procedure for the control class was just as usual. Students discussed the same topic and exchanged ideas in the class. The time for teaching writing preparation of the two classes was the same. They were just required to finish the writing assignment; no extra assessment was needed. The teacher marked the writings solely.

Post Experiment Stage

After twelve weeks of teaching experiment, the writing scores of the latest exam were collected. Then questionnaire would be distributed to the experimental class and interviews would be conducted on tern randomly gather further information. The final score of each composition, results of questionnaire and interviews would be analyzed quantitatively and qualitatively to answer the research questions.

3.4 Procedure

Step 1: The researcher studies the theories of vocabulary assessment and satisfaction measurement to develop questions for the pre-test, post-test, and questionnaire.

Step 2: The researchers measured the relevance of the pre-test, post-test, and questionnaire to the objectives of this study.

Step 3: The pre-test, post-test, and questionnaire were piloted with ten non-English primary Chinese first-year high school students who were not in the same group as the participants in this study.

Step 4: The pre-test was administered to 30 non-English primary Chinese first-year senior high school students. The pre-test including vocabulary mastery and overall English writing proficiency.

Step 5: With the consent of the senior high school and the participants (30 students), the researchers formulated a 4-week vocabulary learning program.

Step 6: The researchers conducted a targeted teaching plan for the 30 students. The overall focus was on the vocabulary Active Learning. Finally, participants were assigned to complete a post-test and questionnaire. The test took approximately 45 minutes.

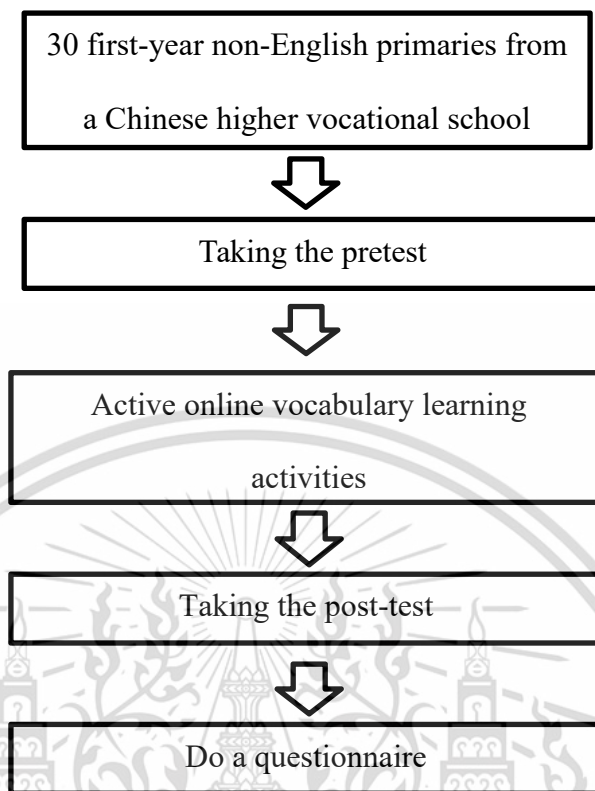


Figure 3.1 Procedures of the study in 4 weeks experiment

3.5 Data Collection

The data were collected through pre-tests, post-tests, and questionnaires.

The "pre-test", first, provides an understanding of the overall level of students' writing level, which provides a guideline for the researcher to plan the lessons, set the weekly lesson content and the lesson planning time. Second, it gives an understanding of students' English writing skills. The situation of the English writing level provides a guiding basis for the content of vocabulary learning and determines the situation of difficult position of vocabulary learning.

The data from the post-test serves would be taken as a comparison. Because the types of test questions on the post-test are the same as those on the pre-test, there is comparability between the pre-test and the post-test. Regarding language ability, comparisons can be made of students' answers to multiple-choice questions (correct rates and scores); regarding English writing skills, comparisons can be made of students' English essay scores.

The design of the questionnaire is mainly aimed at students' satisfaction with the four weeks vocabulary learning activity and their relevant suggestions, which can also reveal the effectiveness and shortcomings of the study and guide the researcher's direction for future research.

3.6 Data Analysis

The pre-test and post-test scores were calculated to find any significant differences by finding the mean of the scores. To find out the standard deviation (S.D.) and the significance of the pre-test and post-test scores, a t-test dependent was used in this study.

Participants explored the differences of their English writing skills through active learning, and conducted a post test after learning activities. Single factor analysis of variance was used in this study.

The quantitative results obtained from the closed-ended questions in the questionnaire determine any significant differences by calculating the mean and standard deviation (S.D.) of the scores. The interpretation of the average score of the close-ended questionnaire was as follows:

4.51 – 5.00 = Very High

3.51 – 4.50 = High

2.51 – 3.50 = Moderate

1.51 – 2.50 = Low

1.00 – 1.50 = Very Low

The quantitative results show that students' perceptions of Active Learning activities are obtained through vocabulary.

Table 3.2 Questionnaire case processing summary

		N	%
Case	Effective	30	100.0
	Excluded ^a	0	0.0
	Total	30	100.0

Table 3.3 Questionnaire reliability statistics

Cronbach's Alpha	Number of items
0.718	20

The above two tables are the reliability test of the questionnaire. According to table 3.2, 30 questionnaires of the questionnaire are valid. According to table 3.3, among the 20 questions in the questionnaire, Cronbach $\alpha = 0.718 > 0.6$, the reliability is good, and it passed the reliability test.

3.7 Summary

According to the design of the topics used in this experiment and the careful selection of participants, the author believes that the results of this experiment must be scientifically based and have great reference value. The author has also learned from this experiment Many techniques for developing experiments and questionnaires, and the experience of designing this experiment will also make the author easier in other future research.

CHAPTER 4

RESULTS

This chapter reports the research results based on data and quantitative methods to achieve the research objectives. The results of this study come from the pre-test, post-test and questionnaire survey completed by 30 students randomly selected from 6 classes. The data obtained from the research tools reveal the answers to four research questions in this study:

1. What do non-native speakers' Online Active Learning activities for English writing Skills look like in a higher vocational college?
2. Is there any significant difference between pre-test and post-test scores of Online Active Learning activities in English writing achievement by comparing item learning scores before and after class?
3. Are there any significant differences in English writing achievement after online active learning activities?
4. What satisfaction of students who study by Online Active Learning Activities?

The research results are presented in the form of tables and explanations. The results of data analysis are divided into two parts:

(1) Comparative analysis of students' pre-test and post-test scores. This part mainly analyzes the pre-test and post test scores of students participating in online active learning activities in terms of English writing scores.

(2) Student satisfaction analysis. This section describes the satisfaction of students participating in online active learning activities through charts.

4.1 The Activities Design and Development

This paper designs four weeks of curriculum activities to verify the impact of online active English learning activities on vocational college students' English writing ability and attitude. In the first course of the first week, the teacher will conduct a pretest to understand students' English vocabulary level, and introduce and display various online vocabulary learning software and other tools for students. In the second course of the first week, students will watch the vocabulary learning video, ask questions, and the teacher will answer the students' questions and summarize. Students will form groups for extracurricular learning to lay the foundation for the next online active learning activity. In the first class of the second week, the teacher guided the students to write a short article to consolidate their previous knowledge. The students used online vocabulary learning software to complete their compositions. After writing, they checked each other's compositions in pairs to improve their abilities. At the same time, the students shared their active online vocabulary learning model. In the second course of the second week, the teacher asked the whole class to write freely within the specified time to improve their writing ability. In the first course of the third week, the teacher guided

students to prove their feedback on each other's work and consolidate their previous knowledge. The teacher guided students to learn vocabulary through online vocabulary learning software around a theme, and asked students to discuss and write down the advantages and disadvantages of online vocabulary learning software. In the second lesson of the third week, the teacher guided the students to discuss their learning experience in the first three weeks, led them to play card games, trained their sentence making ability, and asked them to choose the best vocabulary learning software and give reasons. In the first course of the fourth week, the teacher asked the whole class to write a required composition, determine the online vocabulary learning mode suitable for them, and then conduct a post test on the students. In the second course of the fourth week, the teacher asked students to take a reading comprehension test to test their satisfaction. The teacher and students discussed the learning results in English together, and finally the teacher summarized the course. The activities had validated from 3 expert with Likert Scale in every content topic.

This paper aims to test the impact of online active English learning activities on English writing performance of vocational college students. In order to ensure that the post-test paper of the experiment has good content reliability and conforms to the knowledge level and ability characteristics of students in our Higher vocational college students, the research conducted appropriate investigation and deletion on the difficulty and quantity of test questions, and passed the consistency test of three experts.

Table 4.1 expert validation of Lesson Planning:

No.	Question items	Mean	S.D.	Level
1.	The lesson plan contains all of the necessary elements.	4.33	0.47	High
2.	The content is suited for the students' level of understanding.	4.67	0.47	Highest
3.	The learning activities are relevant to the subject matter.	4.33	0.47	High
4.	Learning activities are designed according to Active Learning methods.	4.67	0.47	Highest
5.	Learning activities are difficult and also easy to suit the level of learners	4.67	0.47	Highest
6.	The timing of the activities is appropriate.	4.33	0.47	High
7.	Digital tools applied to the activities are appropriate.	4.33	0.47	High
8.	Digital tools used for activities are sufficient.	4.67	0.47	Highest
9.	Assessment methodologies are appropriate	4.33	0.47	High
10.	Assessment methodologies are accurate and fair.	4.67	0.47	Highest
	Overall	4.50	0.14	High

4.2 Analysis on the differences of Students' Achievements before and after the Experiment in the Experimental Class

The school involved in this study is a key vocational college subordinate to Zhejiang Provincial Education Commission. On the whole, the students' academic performance can represent the students' level of most vocational colleges in Zhejiang Province, and has good experimental conditions. Therefore, it is selected as an experimental school in order to expand the samples to other schools for further experiments. The subjects were selected from six parallel classes in the first grade of Zhejiang Vocational College, and then 30 students were randomly selected from the six classes. The gender distribution of students is shown in Table 2. The 30 students participated in this study by using cluster sampling technology and implemented online active learning activities on English writing skills for them. The experiment was carried out with the consent of 30 students.

4.2.1 Analysis on the Total Score and Each Score of Students' Composition in The Experimental Class

The scores of the two pre-test and post-test compositions of the experimental class are scored from five aspects: content expression, text organization, grammar, vocabulary, word spelling and punctuation use, and the pre-test and post-test data of these five aspects are paired with sample t-test. The purpose is to test whether there are differences in the scores of the experimental class in the five aspects of English writing through online active learning; Secondly, the pre-test and post-test writing scores of the students in the experimental class are paired sample t-test to test whether the writing scores of the students have improved after the experiment.

Table 2 shows that the P values of the total achievement and five items' achievements of the composition in the experimental class are < 0.05 , indicating that there are significant differences between the pre-test and post-test achievements in the total achievement and the five items of content expression, text organization structure, vocabulary use, grammatical errors, spelling and punctuation errors, and the average achievement of the post-test is higher than that of the pre-test. It shows that after the intervention conditions, that is, after the implementation of process genre teaching method in the experimental class, the total score of students' compositions and the score of five items in the experimental class have been significantly improved. Compared with the pre-test average score of the total composition score and five items score, the overall composition score of the experimental class increased by 2.9 points, the post-test average score of content expression increased by 1.06 points, the post-test average score of text organization structure increased by 1.12 points, the post-test average score of vocabulary increased by 0.28 points, the post-test average score of grammar increased by 0.18 points, and the post-test average score of spelling and punctuation increased by 0.26 points. It can be concluded that after the implementation of the process genre teaching method in the experimental class, students improved the most in content description and text organization structure, and the average achievements of these two items increased by 1.06 and 1.12 respectively.

Table 4.2 T-test of the total achievement of the pre-test and post-test composition and the achievement distribution of each item in the experimental class

Paired t-test results						
Items		Mean value	N	Standard deviation	t	p
Total score of composition	Pre-test	15	30	4	-17.873	0.000
	Post-test	18	30	4		
Content description	Pre-test	3	30	1	-11.499	0.000
	Post-test	4	30	1		
Text organization	Pre-test	2	30	1	-14.182	0.000
	Post-test	3	30	1		
vocabulary use	Pre-test	4	30	1	-2.714	0.009
	Post-test	4	30	1		
syntax error	Pre-test	3	30	1	-2.137	0.038
	Post-test	3	30	1		
spelling and punctuation errors	Pre-test	4	30	1	-2.098	0.041
	Post-test	4	30	1		

Through the analysis of the above writing test results, it can be seen that the online active learning activity teaching method can improve students' English writing performance, which is specifically reflected in the improvement of students' performance in five aspects of composition (content expression, text organization, vocabulary, grammar, spelling and punctuation). The average score of 1.06 points and 1.06 points in the two items of organization and structure, respectively. While verifying that the online active learning activity teaching method can improve students' English writing performance, the author makes a more detailed comparison in five writing aspects

(writing content, text organization structure, grammar, vocabulary or spelling and punctuation use), so as to further analyze the role and influence of the online active learning activity teaching method on students' five writing aspects.

4.3 The Students' Satisfaction

The data in the analysis of students' satisfaction in this experiment comes from the data collected by issuing a questionnaire to 30 experimental students. After the experiment, 30 questionnaires were distributed to the students in the experimental class, 30 of which were recovered, and 30 of which were effective, with a recovery rate of 100%.

4.3.1 Reliability and Validity Analysis of Questionnaire

(1) Reliability Analysis of Questionnaire

The reliability of the questionnaire refers to the reliability and credibility of the questionnaire. It refers to the consistency and stability of the measurement results of the questionnaire when using the same method to investigate the same object, which reflects the authenticity of the measured questionnaire, that is, the degree to which the questionnaire can stably measure the measured things or variables. This experiment uses SPSS software to test the internal consistency of 20 questions in questionnaire 1 to test the consistency between questions in questionnaire 1. The reliability test is expressed by Cronbach a reliability coefficient, which indicates the degree of correlation between problems. If Cronbach a > 0.6 , the reliability is good; If Cronbach a > 0.7 , the reliability is high and acceptable; If Cronbach A is greater than 0.8, the reliability reaches the ideal value; If Cronbach a > 0.9 , the reliability is very ideal. In order to test the reliability of the returned questionnaire, the author tested the reliability of 20 questions in the questionnaire. The reliability test results are shown in Table 4 and Table 5.

(2) Questionnaire validity analysis

Questionnaire validity refers to the validity and correctness of the questionnaire, which means that the questionnaire can accurately measure the correctness of the potential characteristics (contents) to be measured. The higher the validity, the more the measurement results can show the characteristics (contents) to be measured. On the contrary, the lower the validity. The test indicators of validity are KMO value and Bartlett spherical test value. Among them, KMO value is used to compare the correlation coefficient between items, and the value is between 0-1. If KMO > 0.6 , it meets the standard of validity coefficient; Bartlett's spherical test value is used to test whether the correlation coefficient between items is significant. If it is significant (i.e., Sig. < 0.05), it passes the validity test.

Table 4.3 Questionnaire KMO and Bartlett's test

Kaiser Meyer Olkin measure of sampling adequacy		0.700
Bartlett's sphericity test	Approximate Chi-square	1219.120
	df	190
	Sig.	0.000

As shown in Table 6, $KMO = 0.7$, the validity coefficient is more than 0.6, $Sig < 0.05$, the questionnaire passed the validity test. To sum up, questionnaire 1 can carry out the following statistical analysis through the test of reliability and validity.

4.3.2 Data Analysis of Student Satisfaction

Writing class is one of the important factors that affect students' interest in writing. Students' interest in writing class is mainly reflected in the four dimensions of students' learning interest, learning experience, thinking activity (5.10) and learning participation (8.9), involving 10 problems.

Table 4.4 General situation of students' interest in English writing class

Class size	Minimum value	Maximum value	Mean value	Standard deviation
30	1.43	3.66	3.22	0.88

Generally speaking, the average score of the five point Likert scale is between 1 and 2.5, indicating opposition, between 2.5 and 3.5, indicating neutrality, and between 3.5 and 5, indicating approval. This questionnaire tests the conformity of the situation, so the range between 1 and 2.5 indicates nonconformity, the range between 2.5 and 3.5 indicates average, and the range between 3.5 and 5 indicates conformity. After the experiment, the average interest of students in the experimental class is 3.22, which shows that online active learning activities can attract students' attention to writing and stimulate students' interest in writing more than the traditional writing classroom (Table 7).

Table 4.5 Statistical analysis of students' learning interest

Four dimensions of interest	Subject	Mean	S.D.	Result
Learning interest	1. Active online vocabulary learning activities are fun.	3.00	0.93	High
	2. Active online vocabulary learning activities can help you remember words more easily.	3.37	0.84	High
	6. Active online vocabulary learning activities can increase your motivation to learn English.	3.30	0.90	High

Students' interest in writing is affected by various factors, among which teachers' teaching in writing class is one of the important factors. What kind of teaching mode teachers choose will present what kind of teaching classroom. In other words, under the guidance of correct teaching theory, the teaching classroom based on students' learning

needs will improve students' emotional state of learning and writing. Students' learning emotional state is mainly reflected in three aspects: Students' curiosity and thirst for knowledge, the increasing mood and desire for learning, and the gradual improvement of learning objectives.

It can be seen from statistical Table 8 that 60% of the students in the whole class hold a positive and optimistic attitude towards learning English writing skills through online active learning activities. The reason why students' expectations for the writing class increase is that the online active learning teaching mode attracts students' interest in writing topics and mobilizes students' enthusiasm to participate in the writing class by virtue of diversity, interest, group, thinking and empirical activities. For example, when writing the invitation letter, students use brainstorming to accumulate writing vocabulary and phrases. After each group discussion, Show the class the knowledge accumulated by their group. If students participate more in the classroom, they will have more expectations for the writing classroom and further have expectations for writing.

In short, compared with the students under the traditional writing teaching mode, the students under the online active learning teaching mode have increased their curiosity and thirst for knowledge in the writing classroom, their mood is more relaxed and pleasant, their learning desire is continuously strengthened, and their learning objectives are gradually improved.

Table 4.6 Statistical analysis of students' learning experience

Four dimensions of interest	Subject	Mean	S.D.	Result
Sense of learning experience	3. Active online vocabulary learning activities can help you remember more words.	2.90	0.91	Moderate
	4. Active online vocabulary learning activities can provide more ways to learn vocabulary.	3.30	0.90	High
	7. Active online vocabulary learning activities can help you with your English writing.	3.00	1.02	High

As can be seen from Table 9, more than 70% of the students in the experimental class believe that online active learning activities can better stimulate students' enthusiasm to participate in writing. Maintaining good attention is the basic condition for the brain to carry out cognitive activities such as perception, memory and thinking. The duration of students' learning attention, the amount of attention to the content and the depth of thinking can reflect students' interest in Teachers' classroom teaching under the guidance of different teaching modes. The large and small learning interest is positively

correlated with the strong and weak learning attention. Whether to pay attention to the speaker, listen and invest; Whether to always pay attention to the issues to be discussed and maintain long-term attention; Whether you can answer the questions is an important monitoring point of learning attention.

Table 4.7 Statistical analysis of students' learning and thinking activity

Four dimensions of interest	Subject	Mean	S.D.	Result
Learning and thinking activation	8. Active online vocabulary learning activities are more effective than traditional ways.	3.00	1.02	High
	9. I will use the active online vocabulary learning activities for more learning in the future.	3.03	1.17	High

The higher the students' interest in classroom teaching, the higher the thinking activity of learning. Students with high learning and thinking activity can actively think about the questions raised by the teacher, smell and state their views with their own ideas, and even dare to question the speeches of teachers and students and put forward targeted and valuable questions. In the classroom, I want students to maintain a high degree of thinking activity, which not only requires students to have the habit of self-thinking and the spirit of daring to question, but also requires teachers to design teaching activities that are difficult but slightly higher than students' level. The design ideas of teaching activities in writing classroom under different modes are different. In any case, the teaching mode that can arouse students' positive thinking, teach students how to think and exercise students' thinking ability can achieve good teaching effect.

In contrast, the teaching under the online active learning mode takes students as the main body of the classroom, and teachers are the guides and helpers of knowledge. More importantly, students should give full play to their subjective initiative, think actively, dare to explore, cooperate and communicate, and then get answers and acquire knowledge. In the questionnaire, according to the statistical data (66% and 68% of the students who meet the phenomena described in questions 8 and 9 respectively), it can be seen that under the guidance of the online active learning mode, the changes of teachers' teaching methods attract students to participate in the classroom, promote students' independent thinking or cooperative learning, and encourage students to question and speak. The changes of students can tell that they are more and more interested in writing class and writing.

Table 4.8 Statistical analysis of students' learning participation

Four dimensions of interest	Subject	Mean	S.D.	Result
Learning and thinking activation	5. Active online vocabulary activities can increase your motivation to learn English vocabulary.	3.07	0.85	High
	10. Active online vocabulary activities can increase your motivation to learn English vocabulary.	2.87	0.92	Moderate

Learning participation is one of the criteria to measure students' interest in the classroom. The effective application of appropriate writing teaching mode in senior high school English can effectively reflect the dominant position of students in the new curriculum reform environment, enhance students' interest in English, and effectively improve teachers' teaching quality. In the writing class, students' participation is embodied in whether they actively interact with their classmates and teachers, and whether they actively speak. Under the guidance of different teaching modes, students' participation in writing classroom is different.

Some students (23%) who studied under the online active learning teaching mode showed that they were extremely willing to actively participate in classroom activities and actively perform. More than half of the students began to try to participate in the writing class wholeheartedly. This change shows that the online active learning writing teaching mode can enable most students to actively participate in the writing teaching classroom, but it may not fully mobilize students' interest in the English writing classroom and enhance their motivation for writing learning. However, compared with the traditional writing teaching mode, students prefer teachers to use online active learning mode to teach writing.

4.3.3 The Students' Opinions on Open Ended Question

By analyzing the answers to the open questions in the questionnaire, most students in the experimental class have great interest in English writing class, have a certain confidence in their own writing, have significantly changed their writing habits and skills, and have a positive attitude towards English writing. According to the score analysis of the pre-test questionnaire, most students have low scores and lack self-confidence in English writing, and their attitude towards English writing is passive. From the results of the questionnaire, every student has more or less achieved the joy of success. Most students have changed and improved their English writing ability and writing skills to varying degrees. High level students no longer feel that their previous writing is lack of challenge. They can focus on higher-level writing methods and give full play to their strengths and advantages in hierarchical groups. Middle level students can fully consider the complexity of vocabulary, the diversity of phrases and the variability of sentence patterns in writing, have a deeper understanding of applied knowledge and make progress

in group learning. Low level students no longer have a negative attitude towards writing, can take the initiative to learn English writing, have a higher interest in English writing class, and enhance their writing confidence.



CHAPTER 5

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATION

This chapter summarizes the research, and summarizes the research results, discussions, conclusions and suggestions for further research.

5.1 Summary of the Study

The purpose of this study is to explore the effectiveness of online active learning method in the teaching of English writing skills for first-year students in Zhejiang Vocational College, China, and students' attitude towards online active learning of English writing skills.

Writing is not only a personal behavior, but also an interactive activity, but also a tool for conveying information exchange. English writing is a process in which learners express themselves in English on the basis of their mother tongue. English writing teaching is an output process combining teachers' teaching and students' learning. Teachers use various teaching methods, teaching strategies and teaching means to inspire and guide students, so as to cultivate students' interest in writing and the ability of autonomous learning and writing, improve students' knowledge level and skills, and achieve the purpose of classroom teaching. Although there is much attention to the teaching skills of English writing for non-native speakers, there is still a certain research gap in the innovative teaching method of combining the Internet with the traditional teaching mode of English writing skills by using modern science and technology. This study focuses on the English writing test scores before and after learning English writing skills through online active learning activities and students' attitudes towards this teaching model.

The purpose, research questions, research objects, research tools, procedures and data analysis of this study are summarized as follows:

5.1.1 Research Objectives

The current study was conducted in order to investigate three main issues:

1. To design non-native speakers' Online Vocabulary Active Learning activities in English writing skills in a higher vocational college.
2. To compare pre test and post test score of students' English writing learning achievements.
3. To investigate the satisfaction of Chinese higher vocational college students with their online vocabulary Active English writing Learning Activities.

5.1.2 Research Questions

The questions are as follows:

1. What do non-native speakers' Online Active Learning activities for English writing Skills look like in a higher vocational college?

2. Is there any significant difference between pre-test and post-test scores of Online Active Learning activities in English writing achievement by comparing item learning scores before and after class?

3. What satisfaction of students who study by Online Active Learning Activities?

5.1.3 The Participants of the Study

The target population is 180 first-year students of Zhejiang Vocational College (6 classes). First, the researchers determined that all classes had students' grades from high to low. Then 30 students were randomly selected from one of the six classes. The 30 students participated in this study by using cluster sampling technology, and implemented online active learning activities of all English writing skills for them. The experiment was carried out with the consent of 30 students and their parents.

5.1.4 The Research Instruments

The study used two tools. The first tool is the pre-test paper and the post-test paper. The pre-test paper includes 30 multiple-choice questions, which aims to investigate students' application of vocabulary and vocabulary combination used in the writing process. The post-test paper is two English compositions writing to investigate students' English writing ability. The second tool is the questionnaire, which is divided into three parts: Participants' background information, participants' attitude towards online active learning of English writing skills, and their views on the advantages and disadvantages of this learning method.

5.1.5 The Research Procedures

In order to carry out this study, subjects were assigned to conduct a pre-test of English writing ability to explore the mastery of the knowledge they will be taught. Then, they received 16 weeks of arithmetic teaching based on online active learning. After that, they were assigned to do a post-test of English writing ability to explore the changes of their English writing skills. In addition, they were also asked to conduct a questionnaire to express their attitude towards learning English writing through this method.

5.1.6 The Data Analysis

This study aims to find out whether there is a significant difference in the average score of the subjects' English writing skills test by analyzing their pre-test scores and post test scores. In this study, t-test was used to obtain the standard deviation between pre-test score and post-test score and its significance. The data collected from the closed-end questions in the questionnaire are analyzed to obtain the average percentage. The quantitative results of the open-ended questions in the questionnaire are analyzed.

5.2 Summary of the Findings

Aiming at the practical problems in the current writing teaching classroom, such as students' low enthusiasm, teachers' rigid teaching, schools do not set up special writing courses, this study introduces a flexible and interesting teaching mode into high school writing teaching, and explores whether it can reduce or even solve some problems, so as to improve the current situation of writing teaching and improve the effect of writing teaching. Through this experimental study, the following conclusions are drawn.

Firstly, the writing classroom under the online active learning teaching mode can cultivate and develop students' interest in English writing. The results of questionnaires and interviews show that under the online active learning writing teaching mode,

students' interest in English writing has improved to a certain extent after the experiment, while the interest of students in the traditional writing classroom remains basically unchanged. In the online active learning and writing class, students actively participate in classroom activities, follow the teacher's instructions, cooperate with team members, think actively, summarize in time, and the teacher guides and answers questions at any time to help students memorize knowledge, rather than mechanically.

Secondly, the results of questionnaires and interviews show that most students hold a positive attitude towards the online active learning writing teaching model. In the online active learning writing class, students can cooperate and interact with teachers and peers, and are willing to accept the correction of others, and timely correct their writing deficiencies according to the feedback of teachers and peers. Moreover, the online active learning teaching mode provides students with a relatively loose and free cooperative learning environment. In this environment, students can more effectively master the writing theme, use skills to deal with problems in the process of writing, or use writing skills to make the article perfect.

Thirdly, online active learning writing teaching mode is more effective than traditional teaching methods in improving students' writing level. The input and learning link of online active learning mode, the input of knowledge effectively enough, has laid a solid foundation for the output of link language. Learners' learning process is mainly an interactive process of input and output. Input promotes output, and output is the feedback and test of input, so as to make English learners' language and speech ability develop synchronously.

5.3 Discussion

5.3.1 Research Question 1: What do non-native speakers' Online Active Learning activities for English writing Skills look like in a higher vocational college?

English, as a compulsory course in colleges and universities, after the abolition of the English proficiency level 3 exam, English learning is more demanding for students, and students need to take the English level 4 exam, English writing is an essential part of testing students' English proficiency level, and students with good English writing skills can improve students' English exam scores and inspire students' confidence in learning English at the most direct level (Dumitrescu & Ioana, 2015). Overall, to improve your English writing level, you must strengthen your language skills (Yang, & Dixon, 2015). And the ways to strengthen language skills are: 1) Consolidating commonly used language, words that are cognitive will be deepened in memory after constant use; 2) Learning new language, writing is sure to encounter recent events that will not be described. This time can be accessed and then written into the essay, in the process of accessing information can help accumulate a lot of functional languages (Liu, 2016); 3) Strengthen the logic and take up. English writing training can be more English diary. A diary may seem simple, but in the process of describing the event, you can increase your narrative ability and clarify your thinking.

In this study, the main component of online active learning activities is to design the basic operation of applying games to arithmetic. The author of this paper has formulated a teaching plan, twice a week, once for 60 minutes. Students actively learn the relevant vocabulary they need in the process of English writing through online resources.

The course plan is designed for 16 weeks to ensure a game-based teaching course twice a week, which is approved by the consultant of the researcher and three experts in the field.

5.3.2 Research Question 2: Is there any significant difference between pre-test and post-test scores of Online Active Learning activities in English writing achievement by comparing item learning scores before and after class?

Most relevant studies have shown that online active learning activity teaching method can effectively improve students' English writing level. Most of teaching research is to introduce the theory of online active learning activities or study the specific operation steps, and most of the teaching experiments are based on the teaching steps of online active learning activity teaching method proposed by Riffell and Sibley (2003). The research on the genre of the article only focuses on the simple practical writing. Although some include the specific applications of different genres such as narrative, expository and practical writing, they lack the introduction of the characteristics of the corresponding style and the more focused writing teaching design according to the characteristics of different styles.

This paper discusses whether there is a significant difference between pre-test and post-test scores of Online Active Learning activities in English writing achievement by comparing item learning scores before and after class. Through the analysis of the above writing test results, it can be explained that after online active learning, non-English students' English writing skills are significantly improved, which is specifically reflected in the improvement of students' performance in five aspects of composition (content expression, text organization, vocabulary, grammar, spelling and punctuation). While verifying that the online active learning activity teaching method can improve students' English writing performance, this paper makes a more detailed comparison in five writing aspects (writing content, text organization structure, grammar, vocabulary or spelling and punctuation use), so as to further analyze the role and influence of the online active learning activity teaching method on students' five writing aspects. The average score of 1.06 points and 1.06 points in the two items of organization and structure, respectively.

5.3.3 Research Question 4: What satisfaction of students who study by Online Active Learning Activities?

To improve students' learning satisfaction, measures can be taken to ensure effective communication between teachers and students, timely update curriculum content, and improve teachers' discipline and professional quality (Bao, 2019). Ibáñez et al. (2020) conducted a questionnaire survey with students in continuing education as the research object, studied the influencing factors of learning satisfaction, and found that there is a relationship between teachers' quality, teaching content, teaching equipment, teaching plan and learning satisfaction of students in continuing education. The systematic and in-depth research on learning satisfaction began with Roberson and Merriam (2005). Chang and Chang (2012) believe that the learning motivation of middle school students will significantly affect the learning effect in distance education. Leong et al. Studied 9 online courses and found that teachers, technology, task volume and interaction will affect learners' satisfaction. Thurmond et al. (2002) explored the impact of the timeliness of teachers' teaching feedback on learning satisfaction and believed that students will have higher satisfaction if teachers can give students timely feedback in teaching activities. Wei and Chou (2020) have shown through research that learners' self-

efficacy, instructors' attitude, flexibility and quality of courses, ease of use and other factors will have a significant impact on online learning satisfaction, of which course quality and satisfaction are significantly correlated. The learning satisfaction of students who study in the blended learning environment will be affected by the learning atmosphere, the interaction between teachers and students and students, perceived ease of use and perceived usefulness (Elkaseh, Wong & Fung, 2016). Thakker, Parab and Kaisare (2020) pointed out that students' learning experience, technical support of the platform, users' intention to use, students' evaluation methods and students' interactive behavior will affect students' online course learning satisfaction. The research of Shen et al. (2013) shows that students' self-efficacy can be used to predict learning satisfaction.

This paper discusses the attitude of first-year students in Zhejiang Vocational College towards learning English writing skills through online active learning activities, and analyzes the answers in the questionnaire. The survey results show that most participants (more than 70%) believe that learning English writing skills through online active learning activities is very interesting and can create a good atmosphere in the classroom. In addition, they also believe that learning English writing through this method not only helps them remember writing skills more easily, but also improves students' interest in learning.

5.4 Conclusion

Based on combing the research status of online active learning teaching method at home and abroad and analyzing the current situation of English writing teaching, this paper applies online active learning teaching method to English writing classroom, including three writing stages: pre writing information input, in writing information output and post writing revision and finalization, and each stage includes specific implementation and application modes of different links. After four months of writing teaching practice, through the data analysis of questionnaire survey and writing test, the experimental results verify the effectiveness of online active learning teaching method in English writing teaching. Through the research, the author draws the following conclusions:

(1) According to the statistics of the questionnaire, the results show that the online active learning teaching method can effectively change students' attitude towards English writing, and can recognize the help of the online active learning teaching method to their English writing. Students' writing attitude has become more positive and their interest in writing has become stronger. They regard writing as a communicative behavior rather than just serving the examination. At the same time, students have more self-confidence in improving their English writing level, which has changed their previous bad writing habits and writing methods.

(2) According to the statistics of the two writing test results, the results show that compared with the traditional result teaching method, the online active learning teaching method can improve students' English writing performance, which is specifically reflected in the improvement of students' scores in five aspects of composition (content expression, text organization structure, vocabulary, grammar, spelling and punctuation use), but the improvement in content expression and text organization structure is the

highest, The average scores of the two items were increased by 1.06 points and 1.12 points respectively, with an increase of more than 1 point.

(3) Through the statistics of the writing scores of senior students before and after the test, the results show that the web-based active learning teaching method can improve students' English writing level. Under the guidance of the online active learning teaching method, each student participated in the discussion and improved each other. In addition to the positive feedback and guidance from classmates and teachers, they established their confidence in writing. By summarizing writing skills and accumulating writing materials, they stimulated their writing potential, slowly gained writing guidance, and improved their writing performance; Through the imitation analysis of model essays, learning to imitate writing, and the teacher's step-by-step guidance and supervision, the students gradually catch up with the teacher's teaching progress.

5.5 Recommendations

5.5.1 Recommendations for Implementing

(1) Attach importance to the auxiliary role of multiple input methods in English writing teaching. Seeing, listening and reading are the fundamental ways to input language materials. Teachers need to be assisted by other aspects in any aspect of teaching. Seeing, listening and reading are the basic ways for people to understand and understand the external world. Understanding and understanding a language is no exception. People can understand the structure of words and form images in their minds by looking. Listening can recognize the pronunciation of words through sound, reading can understand the meaning of language through the combination of words and words, and can accumulate a variety of language information through reading to enrich their own language content and structure. In the process of writing teaching, strengthening the input of visual, listening and reading is an important accumulation way of subsequent writing output.

(2) Attach importance to the auxiliary role of multiple output methods in English writing teaching. Oral expression is an important means of language material output. "Oral expression" and "writing" are the basic ways of language output, and the way of language processing is in the same direction. Although "Shuo" does not fall on the pen, it can strengthen the use of vocabulary to a certain extent and stimulate students' sensitivity to the use of vocabulary sentence patterns. There are many ways to express English orally. For example, teachers can encourage students to spontaneously create an English language environment. Students can organize English debate competitions and discussion activities according to the topics of writing learning to strengthen students' oral output. Through bold communication, students can strengthen students' English output ability and assist the development of English writing ability.

5.5.2 Recommendations for Further Study

This study proves that the layered teaching of English writing in Senior High School under the guidance of online active learning teaching method can help students at all group effectively improve their English writing performance and provide some practical experience for teachers' teaching. The author hopes that in the future research, more educators will accept and adopt the experimental results of this study, and more scholars will conduct research and Exploration on the basis of further refinement, so as to promote the progress of English writing classroom teaching for non-native students.

Because many students in higher vocational colleges are not interested in learning English, how to improve their interest in learning English actively needs us to jump out of the traditional teaching, so that students can slowly like English through a new class model, from passive to active, which will greatly help our future teaching.



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APPENDIX A

PRE-TEST

The first part is about English writing skills and vocabulary use.

Items 1-30: 30 items×1 mark each= 30 marks.

1. The question is _____ me and I have no idea of it.
 - A. beyond
 - B. over
 - C. beside
 - D. above
2. The students will put off the outing until next week, _____ they won't be so busy.
 - A. when
 - B. as
 - C. since
 - D. while
3. I am _____ of your stupid conversation.
 - A. annoyed
 - B. worried
 - C. angry
 - D. tired
4. I hope my teacher will take my recent less into _____ when judging my examination.
 - A. regard
 - B. counting
 - C. account
 - D. observation
5. Considering his contribution to our company, Mr. White _____ better treatment than this.
 - A. observes
 - B. preserves
 - C. pretends
 - D. deserves
6. American women were _____ the right to vote until 1920 after many years of hard struggle.
 - A. ignored
 - B. neglected
 - C. refused
 - D. denied
7. He was _____ of having asked such a silly question.
 - A. sorry
 - B. guilty
 - C. ashamed
 - D. miserable
8. If you do not fasten your safety belt, your chances of being _____ will be greater.
 - A. beaten
 - B. hurt

- C. damaged
D. stricken
9. This bird's large wings _____ it to fly very fast.
A. able
B. enable
C. unsure
D. cause
10. I found my daughter sitting in the kitchen, crying _____.
A. strongly
B. bitterly
C. heavily
D. deeply
11. When the two young people were married, the ceremony was anything _____ up to data.
A. but
B. beside
C. except
D. apart from
12. What _____ to him is whether the job allows him to pursue his studies.
A. matters
B. refers
C. happens
D. applies
13. He did not _____ staying at home as he had to do his assignment.
A. object
B. mind
C. matter
D. care
14. A _____ of ship sailed into the harbor and moored at it.
A. flock
B. swarm
C. crew
D. fleet
15. Education is _____ for all school-age children in many a country.
A. voluntary
B. sophisticated
C. compulsory
D. extensive
16. If I take this medicine twice a day, it should _____ my cold.
A. heal
B. cure
C. treat
D. restore
17. Our journey was slow because the train stopped _____ at different villages.
A. continually
B. continuously

- C. gradually
D. unceasingly
18. They have done everything _____ to help us.
A. considerable
B. preferable
C. available
D. possible
19. As a journalist you must spend a great deal of money on _____.
A. stationary
B. stationery
C. material
D. paper
20. The once beautiful flowers in the vase had _____.
A. withered
B. wandered
C. wavered
D. Wrinkled
21. In this factory, suggestions often have to wait for months before they are fully _____.
A. admitted
B. acknowledged
C. absorbed
D. considered
22. The boy slipped out of the room and headed for the swimming pool without his parents' _____.
A. command
B. conviction
C. consent
D. compromise
23. Our research has focused on a drug which is so _____ as to be able to change brain chemistry.
A. powerful
B. influential
C. monstrous
D. vigorous
24. The lost car of the Lees was found _____ in the woods off the highway.
A. vanished
B. abandoned
C. scattered
D. rejected
25. Henry's news report covering the conference was so _____ that nothing had been omitted.
A. understanding
B. comprehensible
C. comprehensive
D. understandable
26. She was afraid that unless the train speeded up she would lose her _____ to Scotland.

- A.ticket
B.place
C.seat
D. connection
- 27.The ship was _____ in a storm off Jamaica.
A.drowned
B.sunk
C.wrecked
D. submitted
- 28.No one has _____ been able to trace the author of the poem.
A.still
B.yet
C.already
D. just
- 29.More than one-third of the Chinese in the United States live in California, _____ in San Francisco.
A.previously
B.primarily
C.practically
D. permanently
- 30.The new secretary has written a remarkably _____ report only in a few pages but with all the details.
A.concise
B.clear
C.precise
D. elaborate

POST-TEST

The first part is about English writing skills and vocabulary use.

Items 1-30: 30 items×1 mark each= 30 marks.

1. He was _____ of having asked such a silly question.
 - A. sorry
 - B. guilty
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 - A. observes
 - B. preserves
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 - D. deserves
3. What _____ to him is whether the job allows him to pursue his studies.
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 - D. submitted
8. The new secretary has written a remarkably _____ report only in a few pages but with all the details.
 - A. concise
 - B. clear
 - C. precise
 - D. elaborate

9. Our research has focused on a drug which is so _____ as to be able to change brain chemistry.
- A. powerful
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 - C. monstrous
 - D. vigorous
10. As a journalist you must spend a great deal of money on _____.
- A. stationary
 - B. stationery
 - C. material
 - D. paper
11. Our journey was slow because the train stopped _____ at different villages.
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12. In this factory, suggestions often have to wait for months before they are fully _____.
- A. admitted
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13. Education is _____ for all school-age children in many a country.
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 - D. apart from
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 - C. heavily
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16. If you do not fasten your safety belt, your chances of being _____ will be greater.
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 - C. damaged
 - D. stricken
17. He did not _____ staying at home as he had to do his assignment.
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- D. care
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 C. account
 D. observation
19. I am _____ of your stupid conversation.
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20. American women were _____ the right to vote until 1920 after many years of hard struggle.
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21. This bird's large wings _____ it to fly very fast.
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 C. unsure
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22. A _____ of ship sailed into the harbor and moored at it.
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23. They have done everything _____ to help us.
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24. The boy slipped out of the room and headed for the swimming pool without his parents' _____.
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 B. comprehensible
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- B.place
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D. connection
27. The question is _____ me and I have no idea of it.
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28. The students will put off the outing until next week, _____ they won't be so busy.
A. when
B. as
C. since
D. while
- 29.No one has _____ been able to trace the author of the poem.
A.still
B.yet
C.already
D. just
- 30.More than one-third of the Chinese in the United States live in California, _____ in San Francisco.
A.previously
B.primarily
C.practically
D.permanently

QUESTIONNAIRE

The purpose of this questionnaire is to investigate the attitudes of first-year non-English primaries in a higher vocational college in China towards active online vocabulary learning activities. The questionnaire is for academic research purposes only and your responses will be kept confidential, so please feel free to fill it out. This questionnaire is divided into three parts (Perez, L., 2017).

Part 1: Basic participant information and ways to learn vocabulary

Part 2: Students' attitudes towards active vocabulary learning through online

Part3: Comments and suggestions

Part 1: Basic participant information and ways to learn vocabulary

Directions: Please fill in your information accurately and select the option that matches you.

1. Age:
2. Gender:
3. primary:
4. What is your current way of learning English vocabulary?
 - A. internet
 - B. book
 - C. other ways
5. Do you actively learn English vocabulary?
 - A. yes
 - B. no
6. Do you think English vocabulary is very relevant to English essay?
 - A. yes
 - B. no

Part 2: Students' attitudes towards active vocabulary learning through online

Directions: Please tick the box that best describes your level of agreement with each statement.

- 5=Very Satisfied
 4=Satisfactory
 3=Fair
 2=Not Satisfied
 1=Very dissatisfied

Table A.1 Questionnaire on satisfaction with Active Online Vocabulary Learning

Statements	Level of agreement				
	5	4	3	2	1
1. Active online vocabulary learning activities are fun.					

Table A.1 (Continued)

Statements	Level of agreement				
	5	4	3	2	1
2. Active online vocabulary learning activities can help you remember words more easily.					
3. Active online vocabulary learning activities can help you remember more words.					
4. Active online vocabulary learning activities can provide more ways to learn vocabulary.					
5. Active online vocabulary activities can increase your motivation to learn English vocabulary.					
6. Active online vocabulary learning activities can increase your motivation to learn English.					
7. Active online vocabulary learning activities can help you with your English writing.					
8. Active online vocabulary learning activities are more effective than traditional ways.					
9. I will use the active online vocabulary learning activities for more learning in the future.					
10. Active online vocabulary learning activities can make my thinking more agile.					

Questionnaire on Satisfaction with Active Online Vocabulary Learning Activities

Part3: Comments and suggestions

Direction: Please give opinions or suggestions for the following topics.

1. What do you think are the advantages of active online vocabulary learning?

2. What do you think are the disadvantages of active online vocabulary learning?

3. Do you have any comments or suggestions for active online vocabulary learning activities?



LESSON PLANS

This part is about the lesson plan of the 30 students.

Time: Twice a week, 60 minutes at a time.

Period: 4 weeks

Target students: 30 non-English primaries from Chinese higher vocational colleges.

Objectives:

- 1) Students' vocabulary knowledge is expanded, thus contributing to the improvement of English writing skills.
- 2) Students' initiative in learning English vocabulary is increased.
- 3) Students are able to take the initiative to learn English vocabulary through online resources.

Teaching schedule

Week 1: the 1st time

Table A.2 Teaching Schedule Week 1

Time	Active Learning Process	Learning Activities	Purposes	Tools
10mins	Students get to know the orientation to learning.	The teacher introduces the students to the weekly learning goals	To explain the content of the lesson to students and inform them of any other necessary details they need to know	PPT
45mins	Students get to know their English vocabulary level and English essay writing level, and get the motivational orientation.	Teacher administer pre-tests to Students.	To understand the students' English vocabulary level	Quizizz
5mins	Students know the usable tools, and get ready to learn.	Teacher briefly introduces the various online vocabulary learning software, resource libraries, and other tools that will be used during the four	To encourage students to learn vocabulary independently after class	PPT

		weeks, and shows students how to use		
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Week 1: the 2nd time**Table A.2** (Continued)

Time	Active Learning Process	Learning Activities	Purposes	Tools
10mins	Cognitive processing and orientation to learning of students.	Teacher asks Students to watch vocabulary learning videos from the Internet and post questions.	Build a foundation for students to learn vocabulary through videos	PPT VDO
35mins	Readiness of students to learn.	Students watch the video independently and post questions during watching the video.	To exercise students' independent learning skills	Padlet VDO
10mins	Students' motivational orientation.	Teacher answers questions for students and help them summarize.	To exercise students' initiative	Edpuzzle
5mins	Engagement of students to learn.	Students voluntarily form groups for after-school learning	To lay the foundation for students to do better Online Active Learning Activities next time	Schoology Online Discussion

Week 2: the 1st time**Table A.3** Teaching Schedule Week 2

Time	Active Learning Process	Learning Activities	Purposes	Tools
10mins	Students' orientation to learning.	Teacher instructs students to write an essay. And teach grammar related knowledge, so that students can write better.	To consolidate prior knowledge	PTT Padlet

Table A.3 (Continued)

Time	Active Learning Process	Learning Activities	Purposes	Tools
35mins	Motivational orientation of students.	Students finish their own essays with online vocabulary learning software	To increase students' motivation to learn	Google Search vocabulary software Word document
10mins	Engagement for study.	Students work in pairs to check each other's essay.	To improve students' cooperation skills	Google Search vocabulary software Word document
5mins	Cognitive processing of students.	Students share their active online vocabulary learning model	In order for students to learn more about Online Active Learning Activities models	PPT Padlet

Week 2: the 2nd time

Time	Active Learning Process	Learning Activities	Purposes	Tools
15mins	Orientation of students to learning.	Teacher ask the class to “free write” for a set period of time.	To practice the students' ability to form sentences from the vocabulary	PPT MS word
25mins	Orientation of students to learning.	Students finish “free write” on their own.	To practice students' ability to form sentences into essays	MS word

Table A.3 (Continued)

Time	Active Learning Process	Learning Activities	Purposes	Tools
20mins	Motivational orientation of students.	Students share their stories and the class gives guidance on the mistakes.	To improve students' English writing skills	Schoology Online Discussion

Week 3: the 1st time**Table A.4** Teaching Schedule Week 3

Time	Active Learning Process	Learning Activities	Purposes	Tools
10mins	Cognitive processing of students.	Teacher instructs students to prove feedback on each other's work.	To consolidate previous knowledge	PPT
35mins	Orientation of students to learning.	Teacher instructs students to learn vocabulary through online vocabulary learning software around a theme.	To practice students' Active Learning skills	PPT Google Search
15mins	Motivational orientation of students.	Teacher ask students to discuss and write down the advantages and disadvantages of online vocabulary learning software	To understand the usefulness of online vocabulary learning software	Schoology Online Discussion

Week 3: the 2nd time

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Table A.4 (Continued)

Time	Active Learning Process	Learning Activities	Purposes	Tools
30mins	Orientation of students to learning.	The teacher guided the students to discuss the learning experience of the previous three weeks.	To make the learning process more fun	Schoology Online Discussion
15mins	Readiness of students to learn.	The teacher leads the students to play a game of Words Solitaire.	To practice students' ability to form sentences into essays	Schoology Online Discussion
15mins	Cognitive processing of students.	The teacher asked the students to choose the best vocabulary learning software and give the reasons	To practice students' writing skills	Kahoot

Week 4: the 1st time**Table A.5** Teaching Schedule Week 4

Time	Active Learning Process	Learning Activities	Purposes	Tools
15mins	Readiness of students to learn.	Teacher ask the class to write for ten minutes in response to a focused and specific prompt.	To identify the online vocabulary learning mode that fits their habits	Padlet
45mins	Cognitive processing of students.	Teacher conducts a post-test with students.	To understand the effectiveness of students' learning	Quizizz

Week 4: the 2nd time

Table A.5 (Continued)

Time	Active Learning Process	Procedures	Purposes	Tools
20mins	Cognitive processing of students.	Teacher ask the students to take a reading comprehension test.	To measure student satisfaction	Quizizz
30mins	Motivational orientation of students.	Teacher and the students discuss the results of the four weeks of study together in English	To summarize all the activities	Schoology Online Discussion
10mins	Cognitive processing of students.	Summary by the teacher.	To summarize and reflect on active online vocabulary learning activities	PPT

Table A.6 Expert validation of Lesson Planning

No.	Question items	Mean	S.D.	Level
1.	The lesson plan contains all of the necessary elements.	4.33	0.47	High
2.	The content is suited for the students' level of understanding.	4.67	0.47	Highest
3.	The learning activities are relevant to the subject matter.	4.33	0.47	High
4.	Learning activities are designed according to Active Learning methods.	4.67	0.47	Highest
5.	Learning activities are difficult and also easy to suit the level of learners	4.67	0.47	Highest
6.	The timing of the activities is appropriate.	4.33	0.47	High
7.	Digital tools applied to the activities are appropriate.	4.33	0.47	High
8.	Digital tools used for activities are sufficient.	4.67	0.47	Highest
9.	Assessment methodologies are appropriate	4.33	0.47	High
10.	Assessment methodologies are accurate and fair.	4.67	0.47	Highest
	Overall	4.50	0.14	High

APPENDIX B

IOC Part I and Part II

Online active learning activities to enhance English writing skills for non-native speakers in vocational college

Description:

This test is part of a study Online active learning activities to enhance English writing skills for non-native speakers in vocational college. Your responses are valuable and considered highly confidential. This test has 2 sections.

The following are the findings of the evaluation from 3 experts in order to summarize the experts' opinions:

Direction:

Read through the test questions in this form. Please indicate the degree to which each item is congruent with the objective of this study. If you have any comments on the congruence of each question, please record them in the space provided. Tick (✓) to rate the congruence according to the scale below.

+1 = certain that the question is congruent with themes of Online active learning activities to enhance English writing skills for non-native speakers in vocational college.

0 = uncertain that the question is congruent with themes of Online active learning activities to enhance English writing skills for non-native speakers in vocational college.

-1 = certain that the question is NOT congruent with themes of Online active learning activities to enhance English writing skills for non-native speakers in vocational college.

Table B.1 Expert Evaluation Form

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
1.	The question is ___ me and I have no idea of it. A. beyond B. over C. beside D. above	+1	+1	+1	3	1.00	Used
2.	The students will put off the outing until next week, ___ they won' t be so busy. A. when B. as C. since D. while	+1	+1	+1	3	1.00	Used

Table B.1 (Continued)

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
3.	I am _____ of your stupid conversation. A. annoyed B. worried C. angry D. tired	+1	+1	+1	3	1.00	Used
4.	I hope my teacher will take my recent less into _____ when judging my examination. A. regard B. counting C. account D. observation	+1	+1	+1	3	1.00	Used
5.	Considering his contribution to our company, Mr. White _____ better treatment than this. A. observes B. preserves C. pretends D. deserves	+1	+1	+1	3	1.00	Used
6.	American women were _____ the right to vote until 1920 after many years of hard struggle. A. ignored B. neglected C. refused D. denied	+1	+1	+1	3	1.00	Used
7.	He was _____ of having asked such a silly question. A. sorry B. guilty C. ashamed D. miserable	+1	+1	+1	3	1.00	Used
8.	If you do not fasten your safety belt, your chances of being _____ will be greater. A. beaten B. hurt C. damaged D. stricken	+1	+1	+1	3	1.00	Used
9.	This bird' s large wings _____ it to fly very fast. A. able B. enable C. unsure D. cause	+1	+1	+1	3	1.00	Used
10.	I found my daughter sitting in the kitchen, crying _____. A. strongly B. bitterly C. heavily D. deeply	+1	+1	+1	3	1.00	Used

Table B.1 (Continued)

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
11.	When the two young people were married, the ceremony was anything _____ up to data. A. but B. beside C. except D. apart from	+1	+1	+1	3	1.00	Used
12.	What _____ to him is whether the job allows him to pursue his studies. A. matters B. refers C. happens D. applies	+1	+1	+1	3	1.00	Used
13.	He did not _____ staying at home as he had to do his assignment. A. object B. mind C. matter D. care	+1	+1	+1	3	1.00	Used
14.	A _____ of ship sailed into the harbor and moored at it. A. flock B. swarm C. crew D. fleet	+1	+1	+1	3	1.00	Used
15.	Education is _____ for all school-age children in many a country. A. voluntary B. sophisticated C. compulsory D. extensive	+1	+1	+1	3	1.00	Used
16.	If I take this medicine twice a day, it should _____ my cold. A. heal B. cure C. treat D. restore	+1	+1	+1	3	1.00	Used
17.	Our journey was slow because the train stopped _____ at different villages. A. continually B. continuously C. gradually D. unceasingly	+1	+1	+1	3	1.00	Used
18.	They have done everything _____ to help us. A. considerable B. preferable C. available D. possible	+1	+1	+1	3	1.00	Used

Table B.1 (Continued)

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
19.	As a journalist you must spend a great deal of money on _____. A. stationary B. stationery C. material D. paper	+1	+1	+1	3	1.00	Used
20.	The once beautiful flowers in the vase had _____. A. withered B. wandered C. wavered D. wrinkled	+1	+1	+1	3	1.00	Used
21.	In this factory, suggestions often have to wait for months before they are fully _____. A. admitted B. acknowledged C. absorbed D. considered	+1	+1	+1	3	1.00	Used
22.	The boy slipped out of the room and headed for the swimming pool without his parents' _____. A. command B. conviction C. consent D. compromise	+1	+1	+1	3	1.00	Used
23.	Our research has focused on a drug which is so _____ as to be able to change brain chemistry. A. powerful B. influential C. monstrous D. vigorous	+1	+1	+1	3	1.00	Used
24.	The lost car of the Lees was found _____ in the woods off the highway. A. vanished B. abandoned C. scattered D. rejected	+1	+1	+1	3	1.00	Used
25.	Henry's news report covering the conference was so _____ that nothing had been omitted. A. understanding B. comprehensible C. comprehensive D. understandable	+1	+1	+1	3	1.00	Used
26.	She was afraid that unless the train speeded up she would lose her _____ to Scotland. A. ticket B. place C. seat D. connection	+1	+1	+1	3	1.00	Used

Table B.1 Expert Evaluation Form(Continued)

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
27.	The ship was _____ in a storm off Jamaica. A. drowned B. sunk C. wrecked D. submitted	+1	+1	+1	3	1.00	Used
28.	No one has _____ been able to trace the author of the poem. A. still B. yet C. already D. just	+1	+1	+1	3	1.00	Used
29.	More than one-third of the Chinese in the United States live in California, _____ in San Francisco. A. previously B. predominantly C. practically D. permanently	+1	+1	+1	3	1.00	Used
30.	The new secretary has written a remarkably _____ report only in a few pages but with all the details. A. concise B. clear C. precise D. elaborate	+1	+1	+1	3	1.00	Used

IOC Survey Questionnaire

Online active learning activities to enhance English writing skills for non-native speakers in vocational college

Description:

This Questionnaire is part of a study Online active learning activities to enhance English writing skills for non-native speakers in vocational college. Your responses are valuable and considered highly confidential. This test has 3 sections.

The following are the findings of the evaluation from 3 experts in order to summarize the experts' opinions:

Direction:

Read through the test questions in this form. Please indicate the degree to which each item is congruent with the objective of this study. If you have any comments on the congruence of each question, please record them in the space provided. Tick (✓) to rate the congruence according to the scale below.

+1 = certain that the question is congruent with themes of Online active learning activities to enhance English writing skills for non-native speakers in vocational college.

0 = uncertain that the question is congruent with themes of Online active learning activities to enhance English writing skills for non-native speakers in vocational college.

-1 = certain that the question is NOT congruent with themes of Online active learning activities to enhance English writing skills for non-native speakers in vocational college.

-----This questionnaire aims at exploring the 'usefulness of Online active learning activities to enhance English writing skills for non-native speakers in vocational college. Your most appreciated contribution is expected to be honest and straightforward. Please read all of the questions before answering.

Expert Evaluation Form (Survey Questionnaire)

Table B.2 Part 1: Basic participant information and ways to learn vocabulary

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
1.	What is your current way of learning English vocabulary? A. internet B. book C. other ways	+1	+1	+1	3	1.00	Used
2.	Do you actively learn English vocabulary? A. yes B. no	+1	+1	+1	3	1.00	Used

Table B.2 (Continued)

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
3.	Do you think English vocabulary is very relevant to English essay? A. yes B. no	+1	+1	+1	3	1.00	Used

Table B.3 Part 2: Basic participant information and ways to learn vocabulary

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
1.	Active online vocabulary learning activities are fun. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used
2.	Active online vocabulary learning activities can help you remember words more easily. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used
3.	Active online vocabulary learning activities can help you remember more words. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used
4.	Active online vocabulary learning activities can provide more ways to learn vocabulary. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used

Table B.3 (Continued)

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
5.	Active online vocabulary activities can increase your motivation to learn English vocabulary. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used
6.	Active online vocabulary learning activities can increase your motivation to learn English. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used
7.	Active online vocabulary learning activities can help you with your English writing. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used
8.	Active online vocabulary learning activities are more effective than traditional ways. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used
9.	I will use the active online vocabulary learning activities for more learning in the future. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used

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Table B.3 (Continued)

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
10.	Active online vocabulary learning activities can make my thinking more agile. 5=Very Satisfied 4=Satisfactory 3=Fair 2=Not Satisfied 1=Very dissatisfied	+1	+1	+1	3	1.00	Used

Table B.4 Part3: Comments and suggestions

No.	Question Items	Expert			ΣR	IOC	Result
		1	2	3			
1.	Direction: Please give opinions or suggestions for the following topics: What do you think are the advantages of active online vocabulary learning?	+1	+1	+1	3	1.00	Used
2.	What do you think are the disadvantages of active online vocabulary learning?	+1	+1	+1	3	1.00	Used
3.	Do you have any comments or suggestions for active online vocabulary learning activities?	+1	+1	+1	3	1.00	Used

APPENDIX C

LIST OF EXPERTS

The research instruments of the research entitled “online active learning activities to enhance English writing skills for non-native speakers in vocational college” were the online active learning activities, Rubric of pre-test, post-test and the questionnaire of students’ writing skills.

List of experts for the online active learning activities.

1. English translation expertise
Xu, C, S
Zhejiang University of Technology
2. English translation expertise
Zhou, L, B
Hanzhou Electronic Science and Technology University
3. Educational Technology expertise
Dr. Kittisak Panngam
Educational Supervisor at Nakhonnayok Primary Educational Service Area
Office





No.

School of Industrial Education and Technology
 King Mongkut's Institute of Technology Ladkrabang
 1 Chalongkrung Soi 1, Ladkrabang District,
 Bangkok 10520, Thailand

March 7 , 2022

Dear Dr. Kittisak Panngam

Enclosed with the research's instruments

Mr. Siyuan Ying, a master's degree student in Master of Science Program in Technology-Enhanced Learning and Innovation, King Mongkut's Institute of Technology Ladkrabang is working on a thesis title "Online Active Learning Activities to Enhance English Writing Skills for Non-native Speakers in Vocational College". Asst. Prof. Dr. Kanyarat Sriwisathiyakun is the thesis advisor.

School of Industrial Education and Technology acknowledge on your professional competence in regarding field, the school would like to invite you as a senior expert to evaluate on accuracy and appropriate of the content on research's instruments. The recommendations and reviews from your assessment will be beneficial to the completeness of Mr. Siyuan Ying's research.

Please consider on this invitation and the school is looking forward and most appreciated for your kind acceptance.

Yours Sincerely,

(Assistant Professor Dr. Worapong Pairindra)

2022/03/07 Time: 15:44:16 Non-PKI Server Sign-LN

Signature Code : MA8DA-EQAQA-BEADM-AQqBG



No.

School of Industrial Education and Technology
King Mongkut's Institute of Technology Ladkrabang
1 Chalongkrung Soi 1, Ladkrabang District,
Bangkok 10520, Thailand

March 7, 2022

Dear Mrs. Xu Cheng Si

Enclosed with the research's instruments

Mr. Siyuan Ying, a master's degree student in Master of Science Program in Technology-Enhanced Learning and Innovation, King Mongkut's Institute of Technology Ladkrabang is working on a thesis title "Online Active Learning Activities to Enhance English Writing Skills for Non-native Speakers in Vocational College". Asst. Prof. Dr. Kanyarat Sriwisathiyakun is the thesis advisor.

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Please consider on this invitation and the school is looking forward and most appreciated for your kind acceptance.

Yours Sincerely,

(Assistant Professor Dr. Worapong Pairindra)

2022/03/07 Time: 15:43:00 Non-PKI Server Sign-LN

Signature Code: OABBA-DAARp-ATAEM-AMQ4y



No.

School of Industrial Education and Technology
King Mongkut's Institute of Technology Ladkrabang
1 Chalongkrung Soi 1, Ladkrabang District,
Bangkok 10520, Thailand

March 7 , 2022

Dear Mrs. Zhou Lian Bing

Enclosed with the research's instruments

Mr. Siyuan Ying, a master's degree student in Master of Science Program in Technology-Enhanced Learning and Innovation, King Mongkut's Institute of Technology Ladkrabang is working on a thesis title "Online Active Learning Activities to Enhance English Writing Skills for Non-native Speakers in Vocational College". Asst. Prof. Dr. Kanyarat Sriwisathiyakun is the thesis advisor.

School of Industrial Education and Technology acknowledge on your professional competence in regarding field, the school would like to invite you as a senior expert to evaluate on accuracy and appropriate of the content on research's instruments. The recommendations and reviews from your assessment will be beneficial to the completeness of Mr. Siyuan Ying's research.

Please consider on this invitation and the school is looking forward and most appreciated for your kind acceptance.

Yours Sincerely,

(Assistant Professor Dr. Worapong Pairindra)

2022/03/07 Time: 15:43:29 Non-PKI Server Sign-LN

Signature Code: RgBEA-EIARA-A2AEY-ANwBE

APPENDIX D



Figure D.1 The Online Active English Learning Program



Figure D.2 Introduction to vocabulary software

English learning video: <https://www.bilibili.com/video/av61237062/?p=2>



Figure D.3 Software voting

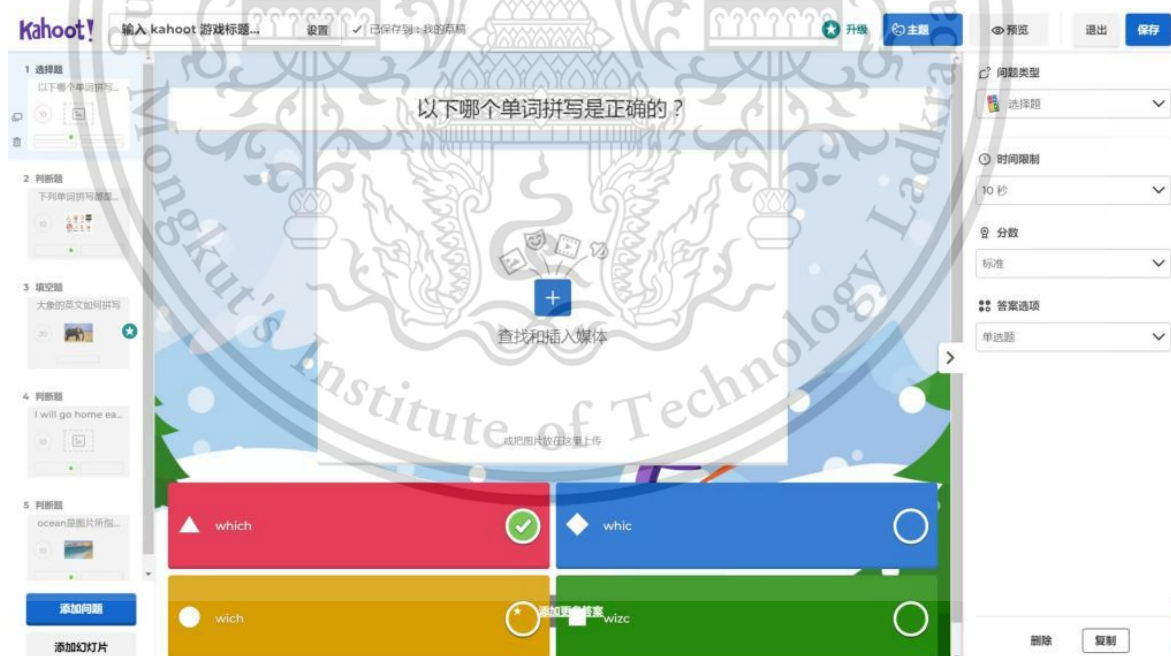


Figure D.4 Pre-test game

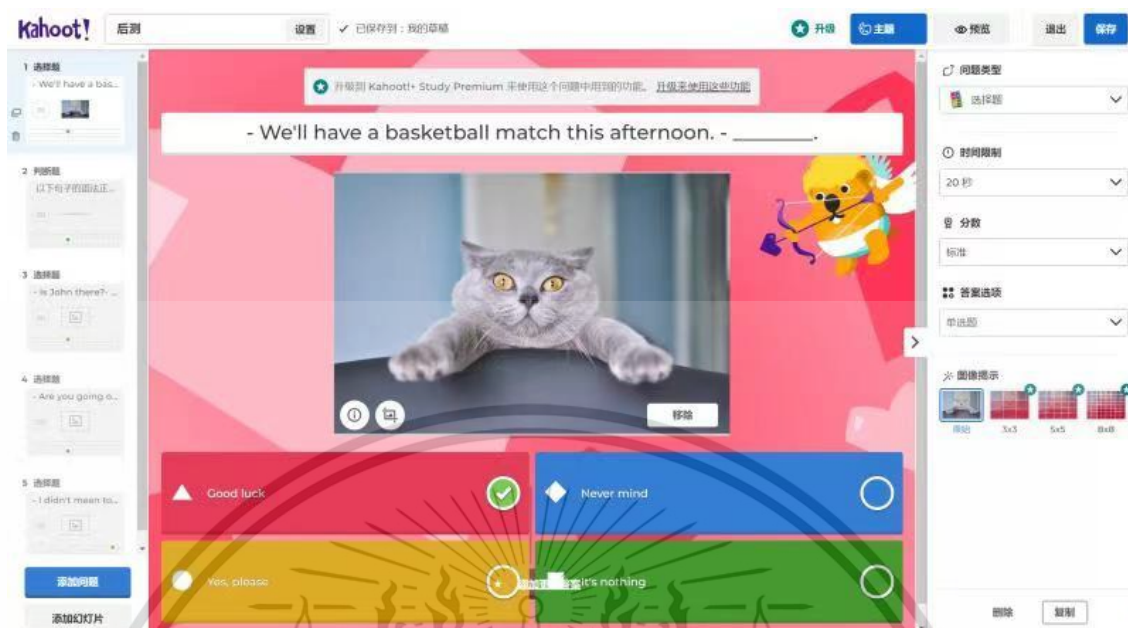


Figure D.5 Post-test game



Figure D.6 Reading comprehension

班级	姓名	性别	问题1					问题2					问题3					问题4					问题5									
			5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
2	陈亚青	女	✓					✓									✓													✓		
2	赵淑婧	女			✓			✓									✓					✓							✓			
2	徐奕帆	男	✓						✓								✓					✓							✓			
2	段文韬	男		✓					✓								✓					✓							✓			
2	徐寒寒	男			✓												✓					✓							✓			
2	徐艳	女	✓						✓								✓					✓							✓			
2	张哲宇	男	✓						✓								✓					✓							✓			
2	王宇昊	男			✓					✓							✓					✓							✓			
2	吴凯杰	男	✓						✓								✓					✓							✓			
2	应欣婷	女		✓						✓							✓					✓							✓			
2	蒋文杰	男			✓					✓							✓					✓							✓			
2	田浩翔	男			✓					✓							✓					✓							✓			
2	汪洋	男	✓							✓							✓					✓							✓			
2	祝鹏呈	男		✓						✓							✓					✓							✓			
2	祝俊杰	男	✓							✓							✓					✓							✓			
2	吴诗怡	女			✓					✓							✓					✓							✓			
2	柴张菁	女			✓					✓							✓					✓							✓			
2	李守琴	女			✓					✓							✓					✓							✓			

Figure D.7 Questionnaire survey

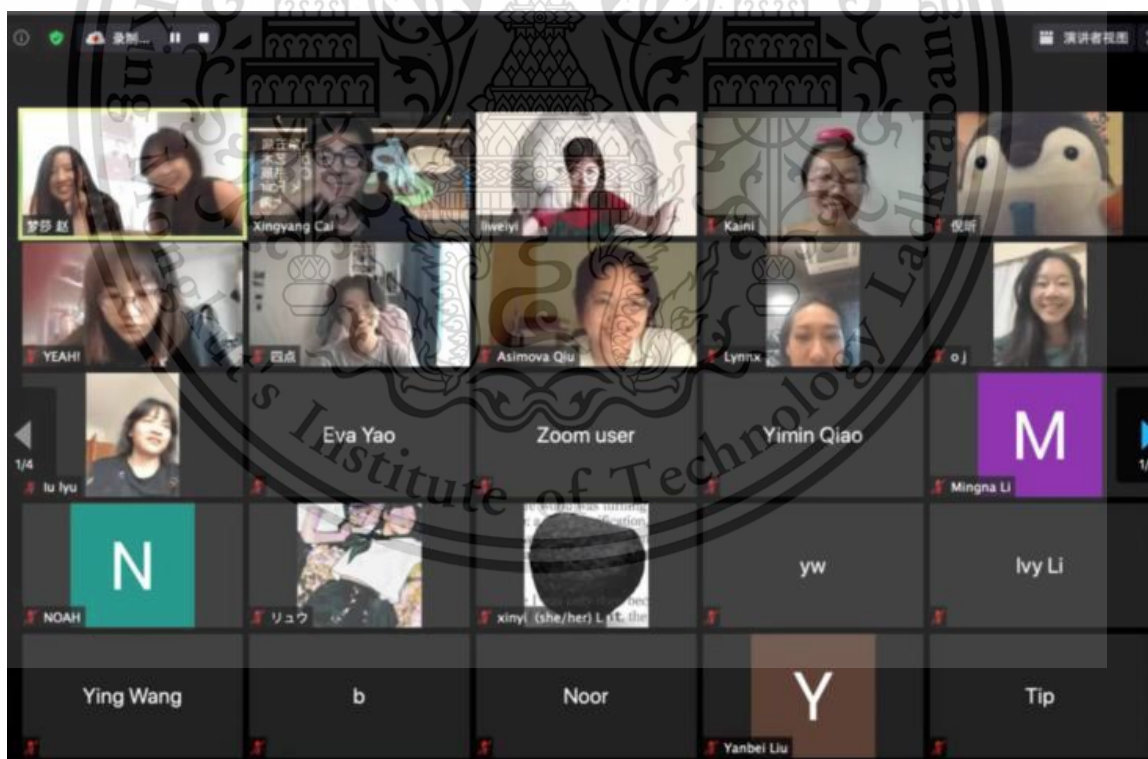


Figure D.8 Online video teaching

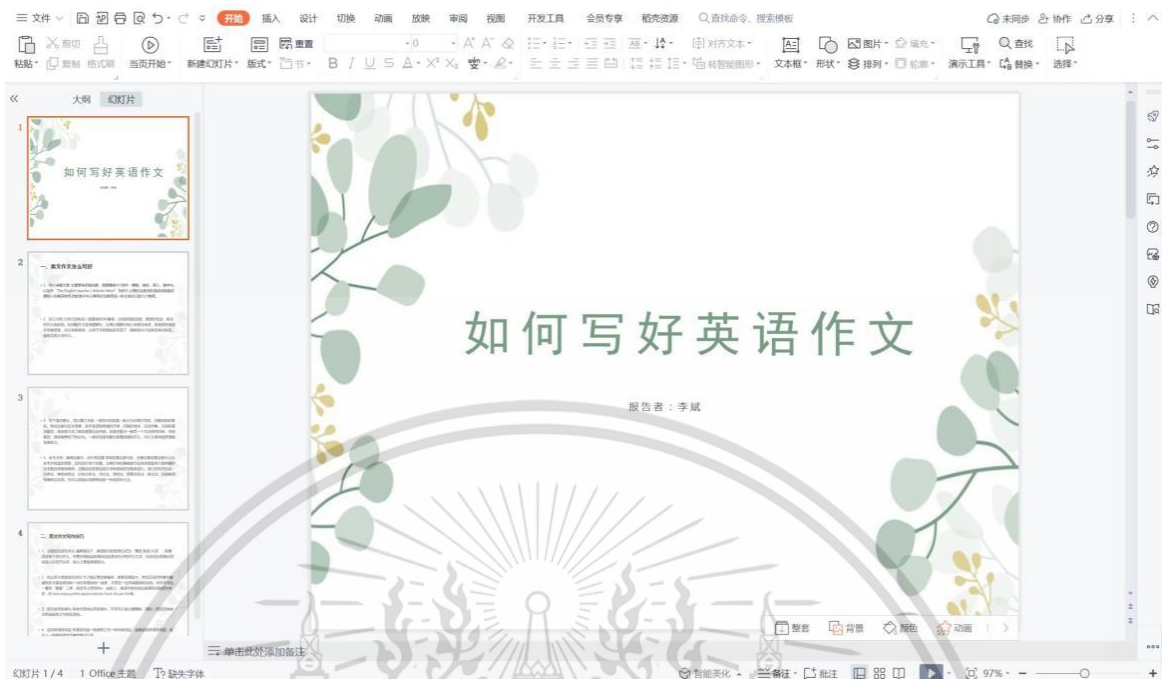


Figure D.9 How to write a good English composition

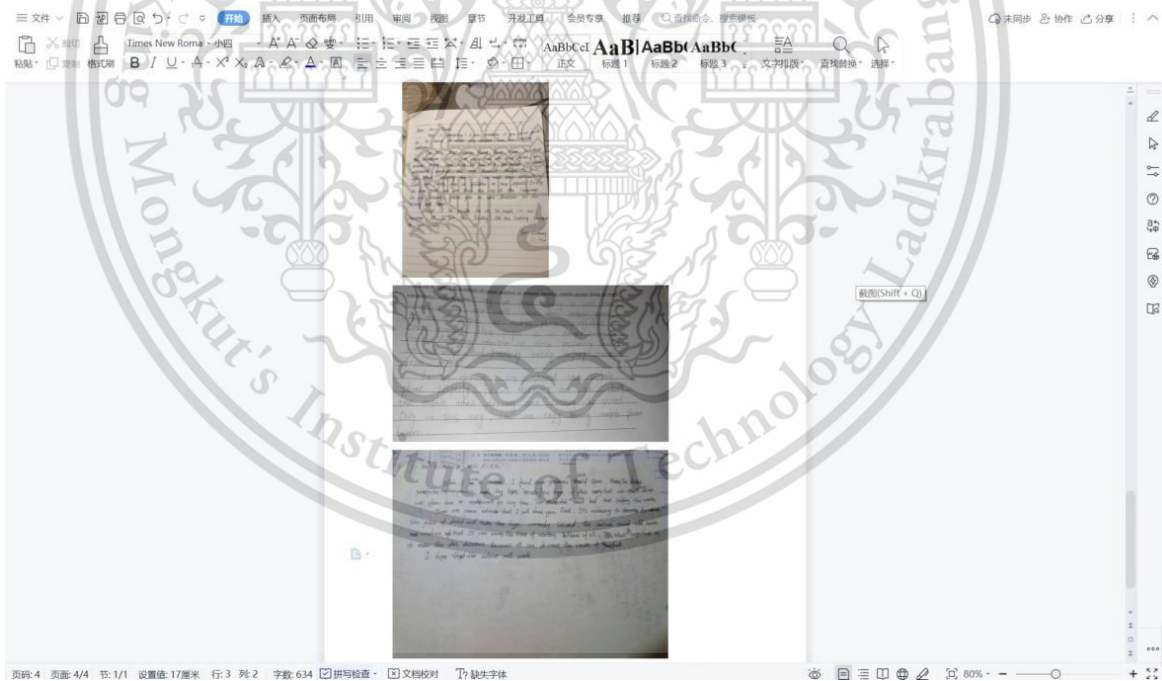


Figure D.10 Student composition

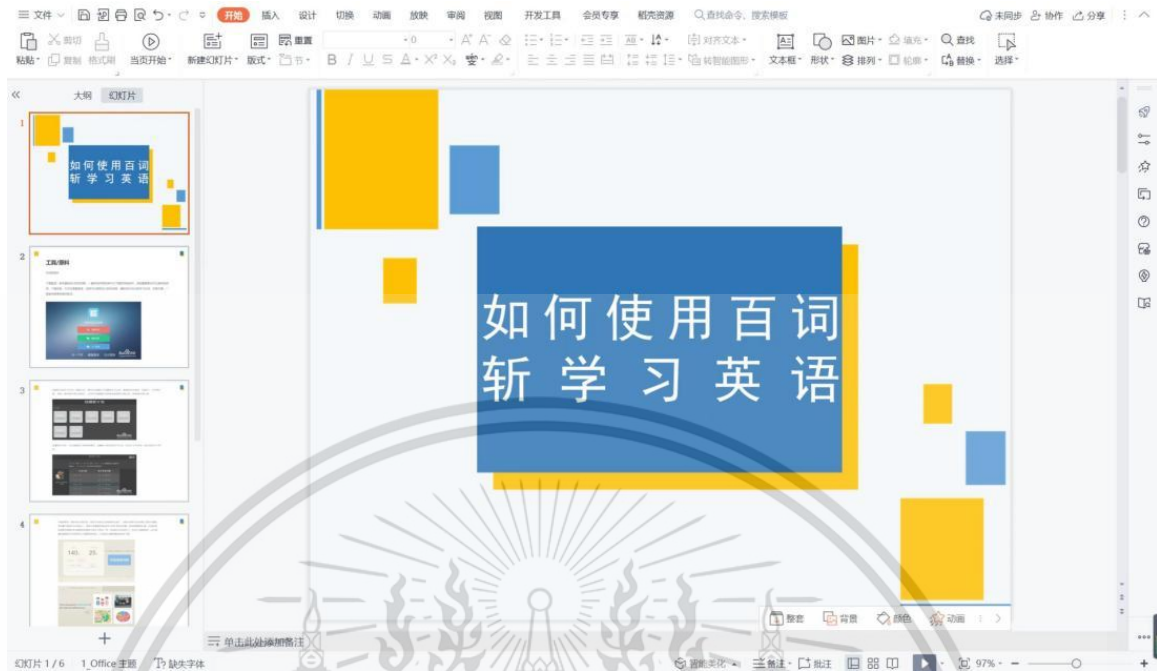


Figure D.11 How to Use the Learning Software to Learn English



Figure D.12 Course summary

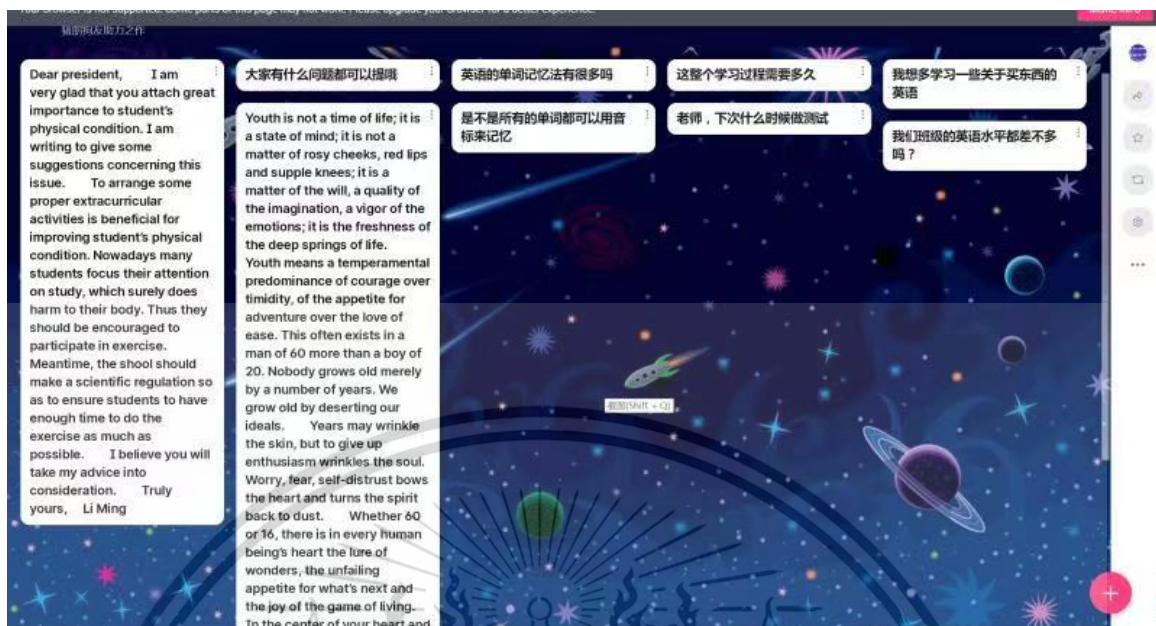


Figure D.13 Padlet



Figure D.14 In the test



Figure D.15 In teaching



Figure D.16 Group activities

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Figure D.17 Kahoot game



Figure D.18 Live photos of the course events

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Siyuan Ying and **Kanyarat Sriwisathayakun** (2022). Online Active Learning Activities to Enhance English Writing Skills for Non-Native Speakers in Vocational College. The 13th *TCU International e-Learning Conference 2022*. 22nd July 2022.