The Use of UMU Interactive Platform in Chinese Language Reading Skills of Grade 10 Thai Students

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Abstract

In recent years, with China's "One Belt and One Road" multinational cooperation, China's development has attracted worldwide attention. With that, understanding China and learning Chinese have become essential abilities for the future. Therefore, in eastern and western countries it continues to be the rage to learn Chinese. At present, there are still many problems in teaching Chinese as a foreign language. Classroom teaching is old-fashioned and boring, students have no interest in learning, and their Chinese listening, speaking, reading, and writing abilities are uneven. Therefore, to enable students to actively participate in classroom learning is an important direction for TCSL teachers to improve their teaching ability.

In this study, the researchers applied the UMU (Interactive platform) to the teaching of Chinese as a foreign language (TCSL) in Grade 10 students in Thailand. This study compared the reading skills of Grade 10 students before and after using the UMU Interactive platform and explored the learning attitude of Grade 10 Thai students after using UMU (Interactive Platform) in learning the Chinese language. The mean scores of the Pre-test and Post-test were 2.83 and 10.75 respectively. The mean score of

the Post-test was statistically higher than the mean score of the Pre-test 7.92. The result showed that the use of UMU (Interactive Platform) was effective to enhanced Grade 10 Thai students' Chinese language reading, and students' learning attitude was high towards the use of UMU (Interactive platform) in learning Chinese language reading.

Keywords: UMU (Interactive Platform), Chinese language reading skills, learning achievement, students' learning attitude.

1. Introduction

"Chinese Language" is recognized by the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 1945) as the most difficult language in the world (Kenneth, K. T., 2017). Today, the Chinese language has become the most popular foreign language in the world. The American magazine "Time" published an article "Get Ahead, Learn the Chinese Language" (Austin R. M., 2006). According to the British the Mandarin Excellence Programme (MEP) survey in 2016, the Chinese language is the most useful language that parents want their children to learn. (Herbert M., 2017). Learning the Chinese language has been recognized all over the world.

Digital technology is helpful in the design of Chinese language listening, speaking, reading, and writing skills. Although applied Chinese language teaching technology attracts a lot of attention, the research is still too little. Especially based on the Internet teaching platform research. UMU (Interactive Platform) is one such teaching platform. It provides an interactive environment, connects people with knowledge, and inspires the mind. The founder, Mr. Li Dongshuo, explains what UMU means: YOU, ME, US that means everyone is connected--the teachers and students can communicate together. It allows more teachers and educators to be connected, which then provides more quality teaching for students, making students have a better learning experience (All Tech Asia, 2017).

Researchers who are in the field of Teaching of Chinese as a Foreign Language (TCFL) have found that alphabetic language is the mother tongue of most overseas Chinese language students. Alphabetic language students can generally reach the

advanced level of Chinese language listening and speaking skills in a relatively short time. The real problem for students is in the cultivation of Chinese language reading and writing skills (Kupfer P., 2003; Zhu J. L., 2005).

1.1 Reading

For students learning a foreign language in an environment with poor input of the target language (Zhang D. X., 2000), reading plays an essential role for students learning a foreign language such as Chinese in an environment. As it is difficult to have the opportunity to communicate with native speakers of foreign languages directly, reading becomes an indispensable source of language input for them and the decisive factor that elevates their foreign language level (Elley, & Mangubhai, 1983; Yao J. P., 2018). Besides, reading can also help students acquire foreign language vocabulary and provide examples for them to write in a foreign language (Wu S. Y., 2013).

Reading has an important position, but we do not know much about the skill of reading. Researchers pointed out that reading is "a skill that we focus on the most, but understand the least" (Clarke, 1980; Yao J. P., 2018). Chinese language students and users are a large group. However, no matter teachers, students, or academia, there is not enough attention to Chinese language reading skills. This situation is a loss to Chinese language teaching and the spread of Chinese culture.

1.2. Problems on TCFL students in Chinese Language Reading

Learning the Chinese language in the absence of a Chinese community or background created considerable differences in the acquisition of the Chinese language (White, 2014; Zhang S., 2014). In Thailand, for example, Chinese companies have invested and cooperated a lot in economics and trade. Every year, a large number of Chinese tourists come to Thailand to travel, which has given about 100 billion yuan of income to Thailand (Xin Hua Net, 2018). Therefore, the Chinese language has become one of the most critical foreign languages in Thailand. It is not only a compulsory course for primary and secondary Thai schools, but also tens of thousands of Thai students

study in China every year (Hanban, 2017). However, reading the Chinese language is difficult for many Thai Chinese language students (Chen T., 2016). Although the students speak Chinese fluently, their reading skills are far below their speaking skills.

Zhou Chujun (2019) found that most Thai middle schools have similar problems: such as limited class hours (usually 1-2 classes a week). Teaching materials do not match the student's level (too difficult, or too easy). Only focusing on language teaching rarely involves Chinese culture; it makes learning boring. The high turnover rate of Chinese teachers leads to a lack of students' learning motivation and weak Chinese foundation. Therefore, Chinese language teachers have to know how to improve students' attitudes and enthusiasm towards the Chinese language, so that they will want to in Chinese language learning. This is one of the most important areas of Chinese teaching research.

1.3. Technology in Education

With the rapid development of computer information technology and intelligent, interactive communication technology, especially in mobile Internet and mobile terminal equipment offers improved convenience for all users and is therefore highly popular. On the other hand, the benefits of smartphones to reduce costs, making mobile phones have become an indispensable part of people's work, life, and study. These things have gradually lead to the field of social extension towards the field of education. Mobile assistant teaching has become frontier research in the field of education.

According to a Survata survey called Top Hat in 2017, 94% of young learners want to use their smartphones for academic purposes in class, and 75% of them believe that using personal devices in class would improve their ability to learn and remember information. Students playing with their phones is changing to students using their phones for their academic studies. It is not merely to make mobile phones and professional teaching to be together, or to bring information from the outside world into the classroom. It could integrate study and life or theory and practice. Learners can use smartphones to complete learning tasks, as well as solve problems in life. Students should learn how to use smartphones in school properly. In Chinese language classes,

we will try to make smartphones--"The Classroom Killer", and to become the "Secret Weapon" of teachers.

Although applied Chinese language teaching technology attracts a lot of attention, the research is still too little. Especially based on the Internet teaching platform research. UMU (Interactive Platform) is one such teaching platform. It is designed to help teachers make Graphics, Audio, and Video interactive courses very easily. Furthermore, the teachers also are able to start questionnaires, discussing, testing, checking, photograph, playing screen, and broadcast through mobile phone, and excel in export students to learn the whole statistics (Huang L. L., 2018). Therefore, it attracts a lot of attention in Chinese education recently. It has also been successfully applied in universities, middle schools and primary schools. The subjects includes Mathematics, Chinese, English, Art, Geography and Biology.

2. Research Objectives

1. To compare the reading skills of Grade 10 students before and after using the UMU Interactive platform.

2. To explore the learning attitude of Grade 10 Thai students after using UMU Interactive Platform in learning the Chinese language.

3. Conceptual Framework

This study the UMU Interactive Platform as the independent variable with students' Chinese Language Reading Skills and Learning Attitude as dependent variables.

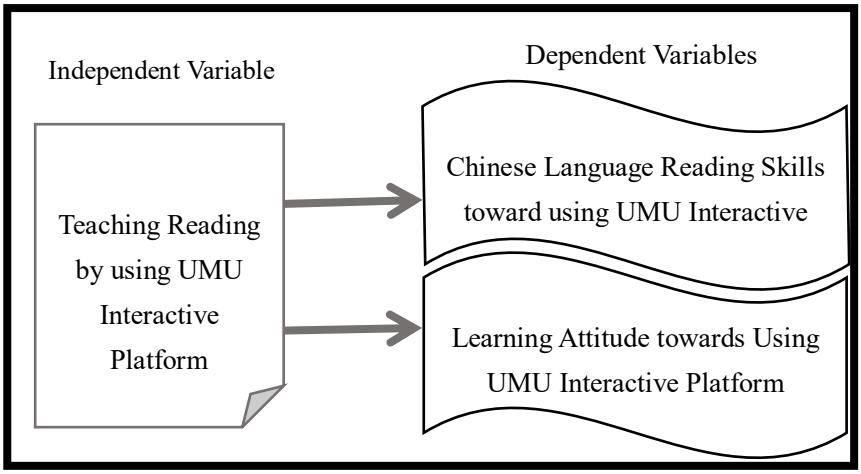

Figure 1. Illustration of the independent variable and dependent variables

4. Literature Review

4.1. UMU Interactive Platform

UMU is an online network-teaching platform, which is interaction and knowledge sharing. UMU (Interactive Platform) originally appeared during the Annual Meeting of the Corporate Training and Development in 2015. It promotes the quality of traditional education, training, and user experience (All Tech Asia, 2017).

The UMU interactive platform has the following characteristics (Sun Y., & Zhang C., 2018):

1) Simple Operation 2) Easily Involved 3) Data Visualization 4) Automatic Storage of Interactive Data

4.2. Current Use of UMU Iterative Platform in Teaching and Learning

With the improvement of training efficiency and the effect of UMU (Interactive Platform), it is eased gradually into school teaching. The following are examples of using UMU (Interactive Platform) in teaching and learning.

Gong Hongmin (2017) studied the application effect of UMU (Interactive Platform) in middle school information technology courses. Wu Xiaolong (2017) evaluated the application effect of UMU (Interactive Platform) in higher vocational English courses, and Guo Yuzhen (2017) practiced the teaching guidance of reading pictures and writing words in primary school students based on the UMU (Interactive Platform). Cui Yuting (2018) studied the application effect of UMU (Interactive Platform) in higher vocational public art courses. Shen Yanjing and Xie Kaibin (2019) practiced the application effect of UMU (Interactive Platform) in middle school biology teaching. Nie Ling (2019) researched the application of UMU (Interactive Platform) in the teaching of linear algebra.

4.3. Teaching Methods of Using UMU Interactive Platform

The teaching method is the embodiment of teachers' "teaching" and students' "learning". It is the unity of the teaching method and learning method in the process of teaching. Different experts have put forward various opinions on the design of the teaching process model concerning the teaching strategies that teachers should adopt, which were proposed by Vaughan (2015), and combined with the advantages of UMU, the teaching procedure would be divided into the following stages: Pre-class, In-class, and After-class.

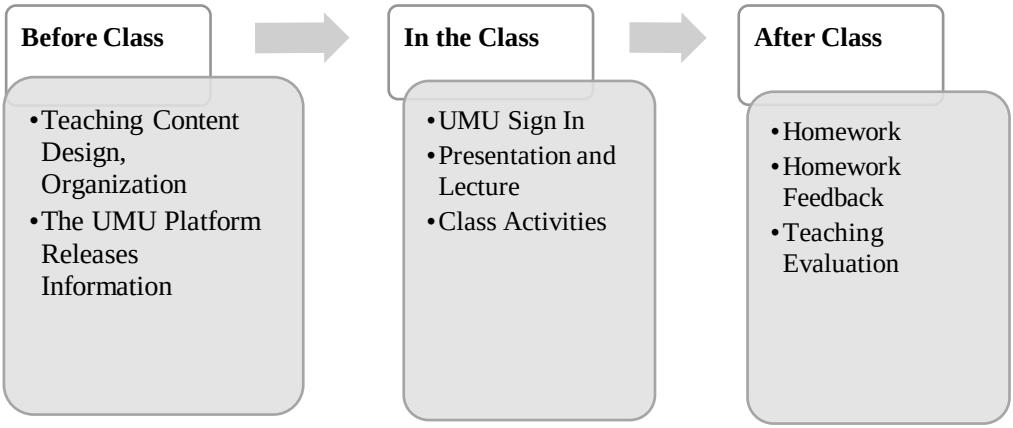

Figure 2. Illustration of Teaching Methods

4.4. Advantages of Using the UMU Interactive Platform in Teaching and Learning

UMU (Interactive Platform) combines mobile learning and classroom teaching. It realizes the integration of online and offline learning. By the excellent learning environment in the classroom, and the efficient interaction performance of UMU (Interactive Platform), it gives play to the advantages of the two, generates an efficient teaching and learning method (Li X. X., et al., 2019).

The UMU (Interactive Platform) course is open for everyone. Students can study all the courses. The resource sharing is very powerful, and shared resources only need a mobile phone (Yi H. G., 2018). This platform can be used to avoid the traditional classroom teaching situations, such as "only teacher talking", or "zombie classroom" (Chen Y., 2019).

UMU (Interactive Platform) can provide students with a better learning and cooperative environment. Students can study both in and out of class. If they have any questions, they can raise them to teachers or classmates at any time and get timely feedback to solve problems (Yi H. C., 2018). UMU (Interactive Platform) is learning-oriented which is in line with the student-oriented concept under the background of the new curriculum reform (Luo X.Y., 2019).

According to Qiu Manli (2016), UMU (Interactive Platform) can provide a lot of convenience for teaching, and enhance the teaching effect. Huang Linli (2018), through UMU (Interactive Platform), used Blended Learning to overcome the students' weak English foundation, limited teaching classes, and the teacher's poor spoken English. By taking "online + offline" Blended Learning, the student becomes the center, making the learning of knowledge easy and fun; the effect is 1+1>2.

Yi Hongcun (2018) agreed that UMU (Interactive Platform) matches Blended Learning. It made people think deeper, with more opportunities to speak. Moreover, the great speech will not disappear by the end of the course. Students can consolidate knowledge, build their confidence, and improve the ability of language learning.

Using UMU (Interactive Platform), teachers can improve their teaching ability, optimizing the teaching model, so that the teaching effect shows up immediately. Through UMU (Interactive Platform), teachers can understand each student's learning

situation, and then prepare teaching lectures and activities (Li X. X., et al., 2019). It also can help teachers and students get closer, become friends who discuss problems with each other and inspire each other.

4.5. Related Studies

In the last few years, some researchers of the Chinese language teaching field tried to improve students' Chinese language listening, speaking, reading, and writing skills by using handheld mobile devices. For example, smartphone applications are combined with Chinese language situational teaching (Xu J. et al., 2010) to improve students' Chinese language speaking skills. For example, mobile phone SMS or WeChat (Mei S., 2018) can be used to improve students' Chinese language reading and writing skills. The ED puzzle interactive audio-visual platform can be used to make micro-teaching lessons (Lu Z., 2019) or students through making life video by themselves (Kupler C., 2008) to improve students' Chinese language listening and speaking skills. The KAHOOT platform can be used to improve students' Chinese language reading skills (Wang Y., 2018). All these are helpful for students to develop comprehensive Chinese language skills.

Technical consciousness is the guiding ideology of establishing Chinese language teaching in the information age (Liu S. H., 2014). "We should attach importance to TCFL (Teaching of Chinese as a Foreign Language) with modern information means" (Chen Z. L., 2005). Chinese language learning needs continuity and diversity. Digital technology is helpful in the design of Chinese language listening, speaking, reading, and writing skills. This teaching method is student-centered. It also helps students have a deeper experience and understanding of the language skills and knowledge they have learned.

5. Methodology

This study employed a mixed-methods approach. The quantitative data were collected through learning achievement tests. The qualitative data were collected

through Classroom Observation and Semi-structured interviews. The learning achievements (Pre-test and Post-test) were conducted to compare students' performance before and after the treatment. The Classroom Observation and Semi-structured interviews were conducted to find out students' attitudes towards using UMU (Interactive Platform) to learn Chinese language reading.

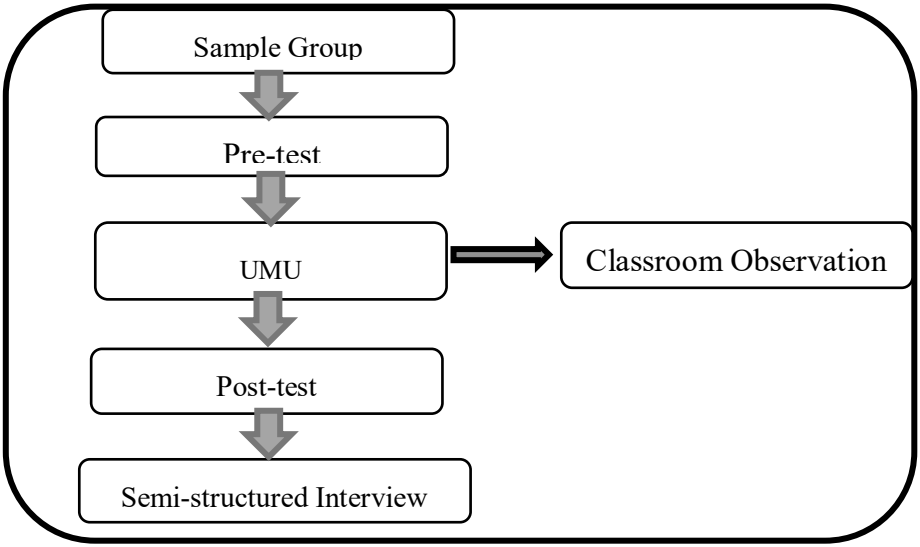

Figure 3. Illustration of Research Design

5.1. Participants

In this study, the participants' data were collected from 12 Grade Ten Liberal Arts Thai students studying the Chinese language in one of the higher secondary schools in Rayong, Thailand. Their ages were from 16-17 years old. All of the students were born and have been educated in Thailand, and Thai is their first language, despite coming from a variety of family backgrounds and cultures.

5.2. Research Instruments

This study had the following instruments: four lesson plans, achievement tests (Pre-test and Post-test), Semi-structured Interviews, and Classroom Observation (CO).

5.2.1. Lesson Plans

The researcher developed four lesson plans of 100 minutes each (1 Lesson Plan = 2 Sessions) incorporating UMU (Interactive Platform) which were used in the class. The researcher taught 8 sessions (2 sessions per week) in the sample group in one month and practiced reading skills with UMU (Interactive Platform).

5.2.2 Learning Achievement Test

In this study, the researcher adopted the standard of HSK-2 (Reading Part) (国家汉语水平考试委员会 National Chinese proficiency examination committee, 1997) to set the achievement tests. Pre-test and Post-test were the questions the same but in different methods. The Pre-test was conducted before giving the treatment and tested the students with the UMU Interactive Platform. The Post-test was given after the treatment to the same group of students.

5.2.2. Semi-structured Interview

The participants were interviewed at the end of the study to examine the student's attitude on using UMU (Interactive Platform) to learn Chinese language reading. The semi-structured interview was comprised of five items which were open-ended questions that could help the researcher to find in-depth information about facts or opinions of the participants.

5.2.3. Classroom Observation (CO)

Observation is a method of collecting qualitative data in research by systematically recording the behaviors of the participants during the activity. Three sessions (1st, 4th and, 8th) were observed and qualitative data were collected to examine the effectiveness of UMU (Interactive Platform) in improving the effectiveness of Grade 10 Thai students' Chinese language reading skills.

5.3. Validity and Reliability

Before carrying out the study, all the research instruments were tested for validity and reliability. Three experts (one from Thailand and two from China evaluated the validity of the research instruments). The instruments for this study were validated and rated above 0.67 (IOC) by the experts which indicated that the items were valid for the study.

To check the reliability of the achievement tests, the researcher conducted the reliability test with another section of 12 Grade Ten students who were not part of the sample group. Kuder-Richardson formula 20 (KR-20) was used to measure the reliability of the instrument. The result of the instrument was 0.86, which was greater than 0.7. Thus, the instrument was acceptable and reliable to be used in the study.

5.4. Ethical consideration

To carry out the study, approval was given from Rangsit University research and development center. Before data collection, the researcher received a letter of approval from the principal of the research school and the head of the foreign language department. Consent was also sought from the children and their parents to take part in the study. The participants' details and responses were kept confidential and anonymous throughout the study.

6. Results and Findings

6.1. Data Analysis of Students' Learning Achievement

To answer the first research question, "Would UMU Interactive Platform improve Chinese language reading skills of Grade Ten Thai students?" The quantitative data collected from Pre-test and Post-test were analyzed using Wilcoxon Signed Rank Test.

Table 1: Individual Students' Pre-test and Post-test Scores

Student Number	Pre-test Scores	Post-test Scores	Improvement of Scores
1	3	10	+7
2	2	18	+16
3	2	3	+1
4	1	7	+6
5	3	10	+7
6	3	9	+6
7	5	19	+14
8	3	12	+9
9	4	9	+5
10	3	13	+10
11	2	4	+2
12	3	15	+12
Mean Scores	2.83	10.75	7.92

Table 1. shows the students' Pre-test and Post-test scores as well as their score improvement. In the Pre-test, the highest score of the students is 5 and the lowest score

is 1, where else in the Post-test the highest score of the students is 19 with the lowest score of 3. Student no. 2 showed the highest difference of 16 points, while student no. 3 showed the lowest but an increase of 1 point. The result scores showed that the Post-test scores were higher than the Pre-test scores. The mean (X) scores of the Pre-test and Post-test were 2.83 and 10.75 respectively, resulting in the mean (X) difference of 7.92. It exhibited that all students had an improvement in their learning achievement in the Post-test. The improvement scores ranged from 1 point as the lowest to 16 points as the highest. Out of 12 participants, not a single student had a negative rank. The positive rank indicates that 100% of the students had improved their scores in the Post-test as compared to Pre-test. The result showed that the Post-test scores were higher than the Pre-test scores.

Table 2: The Comparison of the Pre-test and Post-test: Wilcoxon Signed Rank Test (2 Related Samples)

Pre-test		Post-test		Mean Difference	Z	Sig.(1-tailed)
Mean	SD	Mean	SD			
2.83	1.0299	10.75	4.9749	10.75-2.83=7.92	-3.062[b]	.001
Significance level (p): < 0.05-significant						

The scores of the students' Pre-tests and Post-tests were analyzed using Wilcoxon Signed Rank Test and compared in terms of mean, standard deviation (SD), Z-value, and significance value. From the tables above, the mean scores of the Pre-test and Post-test were 2.83 and 10.75 respectively, resulting in the mean difference of 7.92. The significant value being .001, lower than .05, which indicates the result was statistically significant. This was further illustrated in Figure 4 and Figure 5.

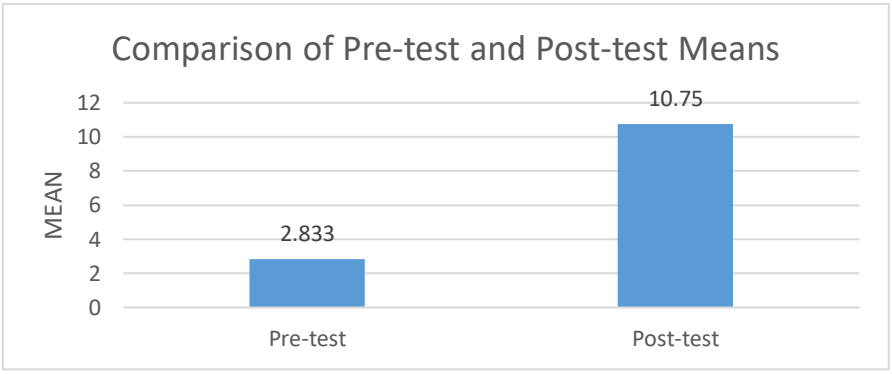

Figure 4. Comparison of Pre-test and Post-test Means

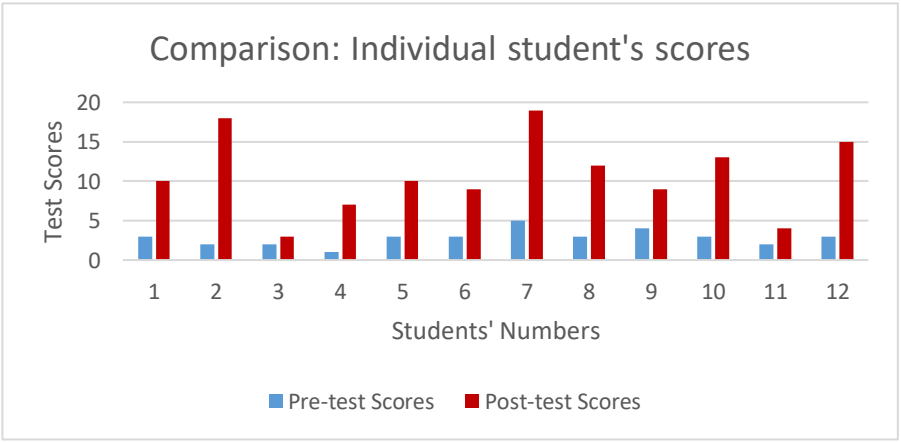

Figure 5. Comparison of Individual student's Pre-test and Post-test Scores

6.2. Analysis of Semi-structured Interview

The qualitative data was collected through semi-structured interviews, and Classroom Observation (CO) to respond to the second research question, "What would be the learning attitude of Grade Ten Thai students after using UMU Interactive Platform in learning the Chinese language?" The interview was conducted at the end of

the study with 12 Grade 10 students (6 males and 6 females). Content analysis was used to analyze qualitative information from the interview with each participant, using five open-ended questions. Students' responses were recorded and translated into English for data analysis. The result of the analysis presented below:

Question 1: ***How did you feel about studying Chinese language reading?***

It was found that almost all the participants agreed it was difficult to learn Chinese language reading. The primary reason is Chinese characters are different from Thai characters. The phonemes and Chinese characters' graphemes do not correspond, therefore they need to be remember individually. Therefore, Chinese characters could not easily be remembered. Reading Chinese sentences was more difficult.

Question 2: ***How did you feel about using of UMU (Interactive Platform) to study Chinese language reading?***

It was found that almost all participants agreed using UMU (Interactive Platform) made them feel excited about learning Chinese language reading. Some of them think UMU is good because less paper was used for printed materials. Some of them thought that using the Internet to study is an advance of education, which allowed them to connect what they learned with their lives. So that they were not only read the Chinese language but also learned about Chinese culture. It helped them to develop autonomous learning skills.

Some of them had differences because the UMU's operating system language did not have Thai only English or Chinese, which was inconvenient for non-native English speakers who were starting to learn Chinese. Others reported they thought it was boring. Furthermore, some said UMU does not offer interesting classroom interaction. Some students did not like to use mobile phones to learn the Chinese language; they felt it was complicated, and preferred traditional teaching methods.

Question 3: ***According to your situation, was UMU (Interactive Platform) helpful for learning Chinese language reading? How?***

It was found that all participants agreed using UMU (Interactive Platform) was helpful to study Chinese language reading. Some people did not know how to improve their Chinese reading ability. Then through the use of UMU (Interactive Platform), they felt that it enhanced their vocabulary memory ability, and they were not afraid of Chinese language reading. Some people liked to type in pinyin on their mobile phones because it was easier to remember Chinese characters than handwriting. Some of them said using UMU (Interactive Platform) enhanced their interest in learning Chinese.

Question 4: ***Which part of the activities in the class did you like the most? Please explain.***

It was found 10 participants liked online interactive activities in the class. Some of them thought interesting games helped them remember Chinese characters. In this way that is easier than reading books. Some of them thought competition made them excited about learning Chinese. Especially, if they could win a prize in the game. However, two of them liked the sentence translation from English into Chinese. They thought it helped them to speak Chinese well.

Question 5: ***Did you prefer online study or normal ones? Why?***

It was found that almost all the participants (6 males and 6 females) agreed that they prefer online study to traditional classroom study because 1) convenience 2) autonomous learning, and 3) found it more interesting.

With all those positive findings, the researcher concludes that the use of UMU (Interactive Platform) enhances students' learning in Chinese language reading.

6.3. Analysis of Classroom Observation (CO)

To supplement answers to the research question, "What would be the learning attitude of Grade 10 Thai students after using UMU Interactive Platform in learning the Chinese language?" The overall data was organized and interpreted in three core themes: 1) classroom participation 2) students' learning attitude in learning Chinese, and 3) mastering Chinese vocabulary.

6.3.1 Classroom Participation

Classroom observation revealed that students actively follow the teacher's instructions and were interested in learning Chinese using UMU. Since students have never been exposed to applications like UMU (Interactive Platform) before, and students' mother tongue is Thai, it was difficult to master the operating system of UMU (Interactive Platform) in Chinese or English in the beginning. It was observed that after practice the participants could operate the UMU (Interactive Platform), and the post-analysis showed they enjoyed the class more. Moreover, the participants were happy about using their phones to learn Chinese according to the post-research interview.

6.3.2 Students' Learning Attitude in Chinese Reading

Classroom observation revealed that the incorporation of UMU (Interactive Platform) motivated the participants to take part in Chinese language reading activities. It was observed that the participants were enjoying the lesson. The participants were found happy to use UMU (Interactive Platform) to practice what they learned in the class, then trying to find out the answer by the internet helped them to learn more.

6.3.3 Mastering Chinese Vocabulary

Classroom observation also exposed that most of the students mastered the Chinese characters they had learned after using UMU (Interactive Platform).

Therefore, the above observations and conclusions supported that the use of UMU (Interactive Platform) played an effective role in enhancing the learning attitude of Grade Ten Thai students in learning the Chinese language.

7. Conclusion and Discussions

The objectives of this study were：

1. To compare Chinese language reading of Grade Ten students before and after using the UMU Interactive platform.

2. To explore the learning attitude of Grade Ten Thai students after using the UMU Interactive Platform in Chinese language reading.

To achieve the objectives, quantitative data was collected through achievement tests; and qualitative data was collected through semi-structured interviews and classroom observation (CO). According to the results of the study, there were two major findings.

7.1. Improving Chinese Language Reading Skills

The first finding of this study was the improvement of the Chinese language reading skills of Grade 10 Thai students. The study showed a significant difference in the performance between Post-test and Pre-test. The means of the Pre-test and the Post-test were 2.83 and 10.75 respectively showing a difference of 7.92, and the significance value (P-value) was .001 as shown in Table 2. The Post-test result observed a larger increase in the scores. These indicated that there was an increase in the learning achievement of the students in Chinese language reading after the use of UMU (Interactive Platform).

Such interactive classroom behaviors enhanced by the use of UMU (Interactive Platform) resulted in a significant improvement in student's Chinese language reading skills. For example; as reflected in the classroom observation by the peer teacher observer, there was a gradual improvement when the students knew how to use UMU

(Interactive Platform) in the class, and students were motivated to study Chinese when UMU (Interactive Platform) was used.

This finding corresponds to the findings by Huang Linli (2018): the mixed teaching practices based on UMU (Interactive Platform) were most effective for the weak language foundation of students and for those with no interest in learning. By taking advantage of mobile terminals and apps, adopting "online + offline" blended teaching, using student-centered practice, making knowledge "fragmented" and "granulated", making learning not hard, but exciting, and making an effect of "1+1>2", the students were more engaged and excited about their Chinese language learning. Although this study was not aimed at TCFL teaching, the same methods and teaching tools would enable students to achieve similar positive results in learning.

7.2. Students' Learning Attitude

The Semi-structured interview was carried out to explore the learning attitude of the students after this study. The interview was guided by five questions. The students shared their opinions in the interview. According to the responses given by the participants, UMU (Interactive Platform) positively impacted their motivation, interest, interactivity, enhanced classroom participation, and showed better scores in learning achievement of Chinese language reading.

The second finding was that Grade Ten Thai students had a positive learning attitude after using UMU (Interactive Platform) in Chinese language reading. It was in line with the finding of Yi Hongcun (2018) based on UMU (Interactive Platform) of secondary vocational English teaching practice which found that students have more fun learning using the UMU (Interactive Platform). Also, it can subtly develop innovative thinking abilities, and doubled students' confidence.

The study additionally found that teachers can continuously improve their information literacy, optimize the teaching model and structure, and the effect on teaching is immediately apparent. The UMU (Interactive Platform) also enables teachers and students to improve their relationship and better understand each other,

creating a friendly relationship where they can discuss problems and also develop a positive learning attitude.

8. Recommendations

This research used UMU (Interactive Platform) in the Chinese language reading skills of Grade 10 Thai students. The study was limited to a section of 12 Grade Ten Thai students. For further studies, similar research can be conducted with larger sample size and different grade levels. To have more reliable and significant results, future studies need to be carried out over a longer period of time.

This study focused only on students' learning attitudes. Therefore, it is recommended that future studies be conducted to find out the opinion of teachers in using UMU (Interactive Platform) in Chinese language reading class. It would be meaningful to conduct a comparative study of the use of UMU (Interactive Platform) with other applications to find out the differences in their effectiveness in Chinese language reading.

9. Acknowledgement

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