

Using TOCFL Reading Application to Improve Reading Mandarin Ability

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Abstract

This study aims to improve student's reading skills and prepare them for the Novice A1 Reading TOCFL (Test of Chinese as a Foreign Language) exam. The tool in this study was the TOCFL Reading application which contained 25 practice questions, with the types of questions: answering based on the pictures given & answering based on the questions given. Respondents to this study were 19 students of English literature at Ma Chung University who had only been learning Mandarin for about one year. This research method is the action research method. Students are asked to do exercises in the TOCFL Reading application two times. The results of this study were that after two tests were carried out in class, all students experienced an increase in scores from 4 points to 40 points; this proves that learning with the TOCFL application can help students improve their reading skills and help them prepare for the TOCFL exam.

Keywords: *Chinese reading, language skill, learning apps, Mandarin*

Introduction

As digital technology advances and becomes more sophisticated and at the same time easy to use, its tools and applications are increasingly becoming a part of everyday life and, of course, education in both formal and informal settings (Panagiotidis, 2018).

Learning Mandarin includes 4 things, namely: listening, speaking, reading, and writing. But in teaching reading, using applications as learning support has been common lately, especially in teaching Mandarin. Teaching Mandarin is not only limited to teaching material books but can also extend to teaching using application media to support learning media. In addition, the application of games in learning can support students in learning letters and remembering the Mandarin characters themselves (Ying, Susilo, et al., 2021). However, in certain cases, internet connectivity problems due to limited data packages result in students needing help learning on their devices (Andujar et al., 2020).

In learning to read, which involves vocabulary, there are still various obstacles, such as a need for more ability to remember or teaching materials less attractive to the students. Therefore, students' ability to memorize and apply vocabulary in everyday conversations will increase with a more fun learning method (Jureynolds et al., 2021). Games as learning media can assist teachers in delivering learning material and motivate students to learn Chinese vocabulary (Rosalin et al., 2021).

TOCFL (Test of Chinese as a Foreign Language) was officially established in November 2005. It is an organization established by the Ministry of Education of the Republic of China. It is a dedicated unit for developing and promoting the "Chinese Language Proficiency Test". It promotes tests related to Taiwanese foreign languages in response to increasing Chinese learning worldwide¹.

Given the increasing interest of students in learning Mandarin and wanting to go to Taiwan to study advanced studies, especially Traditional Chinese, the TOCFL exam needs to be studied, especially the Reading section. Still, over time, learning methods using mobile learning have become more interesting and positively impacted students. So, what is the effect of using the TOCFL application in helping students prepare for the TOCFL exam?

Mobile Online Learning

Using applications in learning plays an important role in mastering teaching materials, especially Mandarin vocabulary. In addition, learning to read on mobile is also a challenge as a teacher or learner. Students widely embrace mobile learning and are willing to use their mobile devices for learning purposes, not only to enhance classroom lectures but also to achieve globalization goals (Department of Computer Science, University of Warwick, CV4 7AL Coventry, United Kingdom et al., 2016).

Mobile-assisted language learning has a major impact on classroom activities and curriculum design. Also, adopting mobile devices can be effective in almost all aspects of vocabulary learning (H Y, 2016). The use of technology as a didactic tool will encourage vocabulary building. Even though we know the challenges that will be faced, such as connectivity problems and students' reluctance to practice the language, we know that using the right strategy will help us get good results (Guaqueta & Castro-Garces, 2018).

The study results show that most students demand vocabulary training applications, which should be more effective and useful, and second language learning, which represents the current situation (Persson & Nouri, 2018; Yurdagül & Öz, 2018) . Therefore, as teachers, we need to study mobile learning system applications in distance education, so that distance education students can enjoy mobile learning more comfortably and quickly. Therefore, Smartphone Applications can have an overall impact by carefully designing and implementing and, according to student needs, can convey various language skills in an authentic learning environment (Kacetl & Klímová, 2019).

So, with the positive effects of e-learning on students. The effects of students in obtaining the subjects given by the teacher and the existence of a link between student behaviour and perceptions about the use of cellular technology in language education (Hoang et al., 2022; Ying, Paulina, et al., 2021).

Chinese Reading Learning

Learning to read can be done in various ways and is not limited to textbooks. Besides that, students also tend to have positive attitudes and perspectives about what they learn and how APP is designed (Hao et al., 2019). By presenting teaching materials in the form of films, stories in a certain proportion can meet the needs of language learners at different levels (Shadiev & Yang, 2020). The writing that appears will also bring up spontaneous

¹ Source : <https://tocfl.edu.tw/index.php/about/committee>

exposure to culture and directed instruction (Wang & Black Delfin, 2021). Combining applications in reading teaching methods will give students motivation and satisfaction in learning themselves.

Method

The TOCFL application is quite simple, and users only need to install the application on the Google Playstore. Then they can answer multiple choice questions (A, B and C), and the types of questions can be given in simple or traditional Chinese characters. In addition, you can set the exam time, answer check and application music in the settings.

This study used a qualitative method with 19 students majoring in English literature as research subjects, in which they would work on 25 reading questions at two different time stages.

Students who take the test in this application are students majoring in English literature, where they study Chinese literature elective courses for as many as six credits with a teaching hour of 6X50 minutes. The data collection in this research is based on the values obtained in testing using the TOCFL application.

Table 1. Minimum & Total Score Requirements to Receive a TOCFL Listening and Reading Certificate

Test Level	Certificate Level	Total Score Required to Receive a Certificate	Minimum Test Scores	
			Listening Test	Reading Test
Band Novice	Novice 1	77	<i>Not applicable</i>	<i>Not applicable</i>
	Novice 2	120	<i>Not applicable</i>	<i>Not applicable</i>
Band A	Level 1	83	37	38
	Level 2	120	51	53
Band B	Level 3	94	42	44
	Level 4	125	53	56
Band C	Level 5	102	46	47
	Level 6	130	54	61

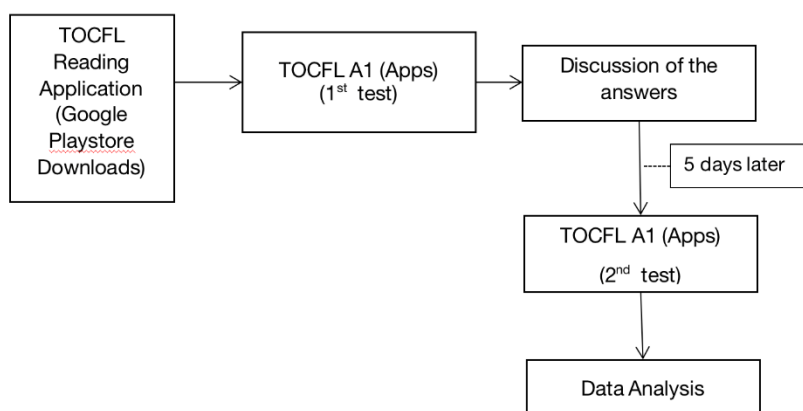
Table 2: Individual examples

Example	Test level	Listening Test Score	Reading Test Score	Certificate
Test taker A	Band A	61	59	Level 2
Test taker B	Band B	53	72	Level 4
Test taker C	Band C	71	59	Level 5
Test taker D	Band C	46	55	Not issued



Picture 1. Main Menu TOCFL Mobile Apps

The minimum score to get the certificate on the TOCFL Novice 1 exam is 77 for the reading section, so with the exam model in this application, we can get an example that understanding as many as 17 of the 25 questions correctly as a preparation for students in learning TOCFL reading material.



Picture 2. Research Framework

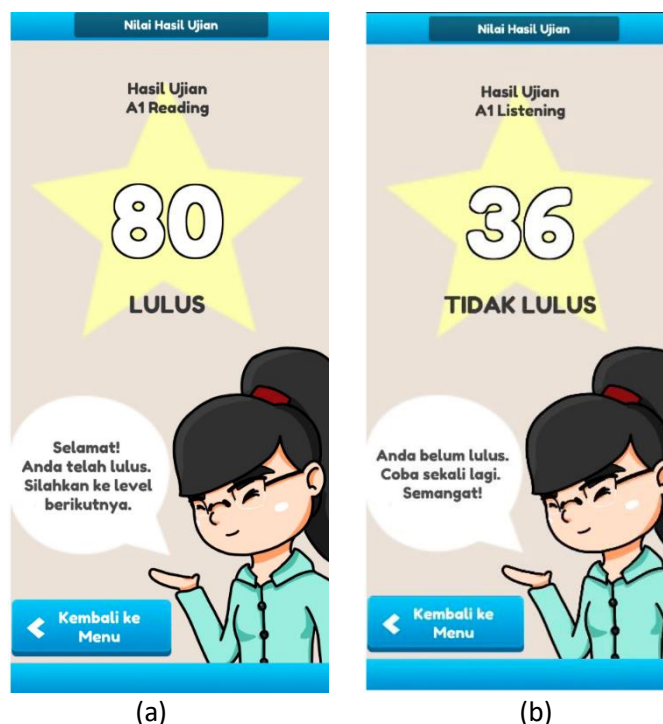
Results

The types of exercises in the TOCFL application include two types: choosing answers from the pictures you see (Pict. 3a) or choosing pictures from the questions given (Pict. 3b).



Picutre 3. (a) Choose Correct Pictures based on Questions;
(b) Choose Correct Answers based on Pictures

The pass score limit in this application is 65 points, with a minimum presentation of 17 correct questions, and if you don't pass, a pass mark will appear (Pict. 4a) and a failed mark (Pict. 4b).



Picture 4. (a) Test Result Pass Score; (b) Value of Not Passing Test Results

Based on the tests carried out on the test for 2 times, the following data is obtained, with an increase rate ratio that tends to be higher. This research includes the results carried out by participants using the TOCFL application, where the use is in real-time and individually. Based on the results obtained, we can see a significant increase in test scores between use in the first and second sessions.

Table 2. Students Test Score Between Using TOCFL 1st time and Using TOCFL for 2nd time

No	1st test	2nd test	Value Increase Progress
A	80	80	=
B	64	92	↑ 28 poin
C	60	80	↑ 20 poin
D	48	72	↑ 24 poin
E	100	100	=
F	76	76	=
G	52	68	↑ 16 poin
H	52	80	↑ 28 poin
I	88	92	↑ 4 poin
J	60	64	↑ 4 poin
K	40	80	↑ 40 poin
L	88	100	↑ 12 poin
M	100	100	=
N	85	100	↑ 15 poin
O	52	80	↑ 28 poin
P	44	76	↑ 32 poin
Q	76	100	↑ 24 poin
R	92	92	=
S	60	80	↑ 20 poin

Discussion

Based on the data obtained, the student error rate is dominated by the question points in sections 10 and 21, with the easiest/most level being on questions 12 & 14.

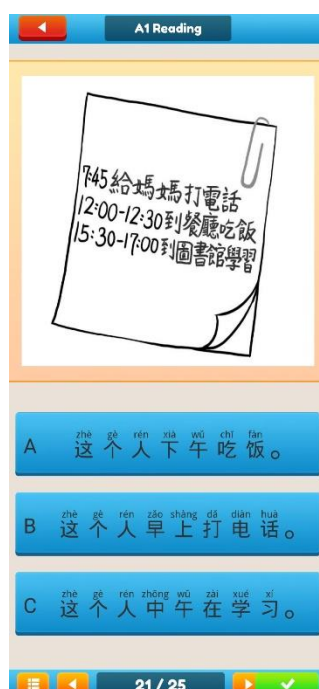
Tabel 3. Comparison of Correct and Answers on TOCFL A1 Reading Examination Questions

Test	Most Errors	100% Right
Tes 1	Question no. 21, 23, 24, 25	Question no. 12
Tes 2	Question no. 10	Question no. 9, 14

Error analysis on test question 1 shows that errors in questions no.21, 23, 24 and 25, which are examples of interpreting the images given, can be categorized as student errors in terms of listening and understanding the images in the application, as Example question on number 21:

7:45 给妈妈打电话 (Gěi māmā dǎ diànhuà)
=call mom
12:00-12:30 到餐厅吃饭 (Dào cāntīng chīfàn)
=Eat at the restaurant
15:30-17:00 到图书馆学习 (Dào túshūguǎn xuéxí)
=study in the library

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- A. 这个人下午吃饭 (Zhège rén xiàwǔ chīfàn)
= This person has lunch in the afternoon
- B. 这个人早上打电话 (Zhège rén zǎoshang dǎ diànhuà)
= This person calls in the morning
- C. 这个人中午在学习 (Zhège rén zhōngwǔ zài xuéxí)
= This person is studying at noon
-



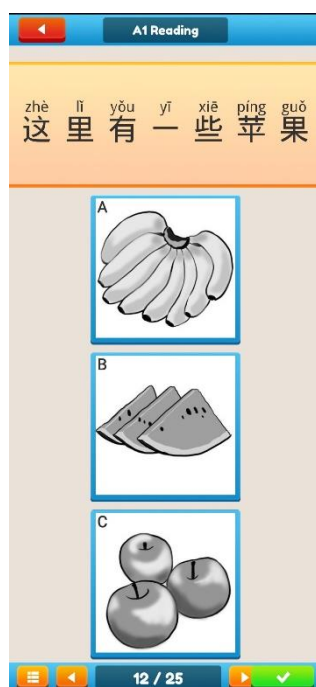
Picture 5. Question no. 21

In the case of an error in the sample questions above, the test results show that there is a tendency for the accuracy of the students' answers to be constant, which was originally 35% → 35%

Tabel 4. Comparison of Errors in Problem no. 21 Reading Test TOCFL A1

1st test	A: 7 Students (35%) = wrong
	B: 7 Students (35%) = correct
	C: 6 Students (30%) = wrong
2nd test	A: 7 Students (35%) = wrong
	B: 7 Students (35%) = correct
	C: 6 Students (30%) = wrong

In terms of the level of accuracy in answering questions, question no. 12 occupies the lowest level of difficulty, or it can be said that many students can understand and answer the questions correctly.



Picture 6. Question no. 12

Answer to question no. 12 on test 1 (100%) → test 2 (95%). This cannot be separated from the convenience of questions that provide pictures as answers directly to students.

Conclusion

Based on the test results above, testing on the 2nd test, it greatly influenced the student's exam results and testing in the form of visuals as answers tend to be easier and be able to train students in critical thinking to answer the questions given.

The limitations of this study are the small number of students in comparison and the number of test questions in the TOCFL application, which are still in the development process (only 25 questions).

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