IMPROVEMENT OF READING COMPREHENSION THROUGH MOBILE ASSISTED LANGUAGE LEARNING WITH THE MAZII AND JAREADS APPLICATIONS DURING THE PANDEMIC

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Abstract

Dokkai or reading comprehension is learning that requires some mastery of skills, such as vocabulary and sentence patterns. In this learning, understanding reading quickly and accurately becomes an important point in learning. This research was carried out during the COVID-19 pandemic, so learning was carried out online. To facilitate the teaching and learning process, distance learning through mobile assisted language learning with the mazii and jareads applications is used. This application makes it easier for students to understand the reading of pithy news that occurs in real time. Short readings make reading fun. This research uses action research with two treatment cycles. In one cycle consists of two meetings. The object of this research is a student who is using this applications for the first time. From the treatment carried out, it was obtained that students' reading comprehension increased, learning mastery, and learning activities took place well. Students can study independently with Japanese learning applications that can be downloaded for free. Students become accustomed to learning online by utilizing learning applications.

Keywords: *dokkai, jareads, mazii, mobile assisted language learning*

1. Introduction

In this era of globalization, technology plays a significant role in the rate of development of various fields, including education. The development of education is so rapid, as evidenced by the many and varied educational applications in the Play Store and Apple Store. Likewise, the emergence of youtubers, both motivators, educators, language observers and other who create and upload subject matter and experiences to their youtube channel to share knowledge and share experiences.

Today, there are also many teachers, who make teaching materials by recording and uploading them to their youtube channel. Respondents or learners can directly access the lesson anytime and anywhere. Learning in this technological era allows learners to access and download content easily and quickly. Youtube content is not only from local teachers or students, for learning Japanese there are many channels made from language schools in Japan. Learning content from the basic level to the upper level is all available on his channel, for example Nihongo no mori. This channel provides various kinds of material about Japan, especially for those who will take the Japanese Language Proficiency Test (JLPT). Not only video media, for learning Japanese there are also many applications that can be downloaded for free about learning Japanese. Applications such as dictionaries, JLPT learning, to culture are available in the play store and apple store. There are also many applications that can be downloaded for free, some are paid if you want to get more complete features. Apps like *obenkyou*, *kanji tree*, *jisho*, *jareads*, and *mazii* are very helpful for Japanese learners to learn independently.

Nowdays, language learners are rarely seen carrying printed dictionaries when studying in class or self-study, they more

often use digital or electronic dictionaries that are easily downloaded to theirs cellphones or gadgets. The sophistication of this technology of course makes it easier for students to take information and learn something new.

For almost two years the covid-19 pandemic has forced all fields. Including education, to conduct distance learning. All materials commonly used in class, all converted to online. This condition is, of course, a new condition, which must be addressed immediately to become a new habit. There are many learning applications that are free or paid to be a solution for learning at this time. Vocabulary can be search by applications or writing *kanji*, are applications that must be installed on the devices of foreign language learners, especially Japanese. Similar applications that provide pithy readings in news are also applications that can be used as solutions to improve *dokkai* skills or reading comprehension independently. The use of these applications is known as *Mobile Assisted Language Learning* (MALL). With mobile phone media, language learning can be done anytime and anywhere. Kukulska and Lesley, (2006) stated:

> MALL is developing very quickly, expanding in the space of two or three years from a purely teacher-learners, text-based model to one that is beginning to support multimedia, collaborative listening and speaking activities and to allow learners to construct knowledge to solve problems and fill information gaps.

From the quote above, it is concluded that language learning with technology based multimedia has begun to be applied.

2. Methods

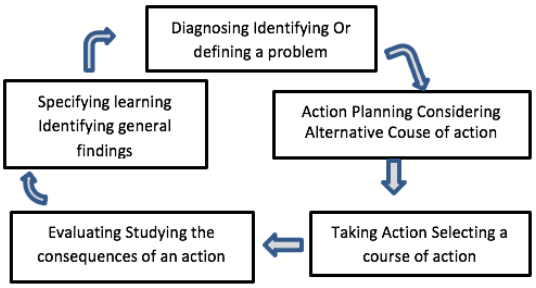


Figure 1. Action Reseach Susman model (susman, 1983 in O'Brien,1998, 5 in Emzir, 2021, 240)

The above model was developed by the University of Cambridge (2011), this model reviews and reviews the action plan that has been formulated. Plans are compared with conditions in the fields, reviewed, discussed, and debated to get a better action plan (Putra, 2014, 47).

Stages in the implementation of research:

1. Identify the problem to be studied.
2. Plan of action, considering alternative actions, and objectives of the action.
3. Take action, choose the goal of the action.
4. Evaluating teaching actions.
5. Specify learning and identify findings common (susman, 1983 in O'Brien, 1998, 5 in Emzir, 2012, 240).

The theoretical studies in this action research are:

a. Ability to understand reading or *dokkai* with Mobile Assisted Language Learning.
b. The approach used is a communicative approach through Mobile Asissted Language Learning.
c. Action research.
d. Assessment of reading comprehension ability or *dokkai.*
e. Applications used by mazii and jareads.

Figure 2. Mazii News Column.

When you click on the news feature, you will presented with various kinds of news that are happening around the world. In the bottom column there are easy, difficult, and favorite post. Easy writing is news that is presented in an easy to understand language, while what is written in difficult is the news that is presented exactly the same as the news posted on NHK, TBS, and other news channels. To facilitate learning, video, and sound are also embedded in each news feature, so that learners can listen while viewing the text of each news.

Figure. 3 Jareads Feature.

The features above are the headlines of each news that will be read. There are several fields or topics to choose from, such as: business, technology, Japan, showbiz, and politics. In this study, the readings were read only on Japanese articles.

3. Theoretical Framework

Language learning through gadgets or mobile assisted language learning during a pandemic like this, is certainly an important part in making the teaching and learning process interesting. Here are some opinions about language learning with m-learning or commonly called mobile assisted language learning abbreviated as (MALL) is believed to be an ideal solution for language learning in the context of time and place (Miangah & Nezarat, 2012). Kulkulska-Hulme in his research, stated:

> Mobile assisted language learning (MALL) is
>
> the use of smartphone and other mobile technologies in language learning, especially in situations where portability and situated learning offer specific advantages. A key attraction of mobile learning is the ubiquity of mobile phones.
>
> Typical applications can support learners in reading, listening, speaking, and writing in the target language, either individually or in collaboration with one another. Increasingly, MALL applications relate language learning to a person's physical context when mobile, primarily to provide access to location-spesific language material or to enable learners to capture aspects of language use in sit and share it with others.

https://onlinelibrary.wiley.com/doi/epdf/10.1002/9781405198431.wbeal0768.pub2

it can be concluded that learning through MALL has various advantages, one of which is that it is not limited to situation and time. Learning can also be done independently or in groups. Learning with gadgets as a tool has been started since the birth of the smart phone. Lindaman and Nolan (2015, 5-6) in the journal IALLT (International Association for Language Learning Technology) stated:

> Earlier scholarly efforts to explore MALL focused on the use of cell phone technology and communication via text messaging

(Towns & Loo, 2012). Only with the development of smartphones do interactive software and rich media become possible for language learning with mobile applications. And then, in 2010, the appearance of new multimedia capable, wifi connected tablet devices significantly broadened the possibility for innovation in the development of mobile language learning tools (Webb, 2010 ; Lys, 2013).

From the quote above, it can be concluded that the beginning of language learning with gadgets is through text messages. However, in the development of sophisticated mobile phones it is possible to learn language with mobile applications. Tablet was invented in 2010 that has the sophistication of being connected to wifi, so that learning through gadgets is significantly more developed.

Advantages And Disadvantages

In language learning, the use of methods is needed to facilitate the teaching and learning process. However, each method has advantages and disadvantages. From these conditions learning can be done as much as possible. Stockwell, G., & Hubbard, P. (2013). Some emerging principles for mobile assisted language learning. Monterey, CA: in The International Research Foundation for English Language Education, stated:

Building on previous work in distance shooting, Elias (2011) reviews eight universal design principles and interprets them for mobile learning. Four of these principles are clearly of value to MALL:

a. Equitable use, “deliver content in the simplest possible format”.

b. Flexible use, “package content in small chunks”.

c. Tolerance for error “scaffold and support situated learning methods”

d. Instructional climate, “push regular reminders, quizzes, and questions to students” (Elias, 2011, 148). (See also Browne & Culligan, 2008).

It can be concluded that with MALL, we can use an easy format, light content, few errors, and can provide reminders such as quizzes to respondents.

The advantages and disadvantages of learning using gadgets of smartphones (Chinnery, 2006, 9-16) in the journal Language Learning & Technology Vol. 10 No. 1, there are:

a. Mobile technology clearly offers many practical uses in language learning. In most cases, they are readily available. In Japan, for example, cell phone ownership has been reported to be almost universal among college aged individual (Dias, 2002, Spring; Thornton and Houser, 2005). In a recent study of students in higher education in the United States (Kvavik, 2005), 82% owned a cell phone. In the same study, however, less than 12% had a PDA.

b. Mobile technology is usually less expensive than standard equipment, such as PCs. Mobile media portability is another advantage. They can be used as easily outside of the classroom as they can in it; students can study or practice manageable pieces of information anywhere at their own time, thereby taking advantage of their convenience. Ultimately, these benefits demonstrate the potential of MALL in expanding social inclusion in language learning.

Disadvantages and challenges of using learning media devices or smartphones, there are:

a. Mobile media portability is the reduced screen size.

b. Limited audiovisual quality, virtual keyboard and one finger data entry, and limited power. In addition, availability may be limited. While cell phone

ownership may be nearly universal for college age individuals, this is not the case for other populations or media.

c. The costs that educational institutions incur to buy them in bulk can be staggering. However, Gilgen (2004) has demonstated the possibility of developing mobile laboratories for schools with limited funds.

d. Other potensial drawbacks include limited nonverbal communication, limited message length, lack of cultural context, and potentially limited social interaction. As mobile technology advances, its output rapidly shifts from verbal to visual, a clear disadvantages for language learning (Colpaert, 2004).

e. Connection issues are also a concern: web-based language learners may choose to limit their online connection time, or they may not have access at all.

Definition Of Reading

The definition of reading in Japnese quoted from Kyoiku Jiten is as follows:

「読むこと」は文字を媒介として文の内容を読み取り、理解することである。それはまず、文字と音との対応に始まり、文字によって構成される語の読み方と意味の学習、単に大きい単位である句、文、段落、文章における読み方と意味、または内容の学習が含まれる。

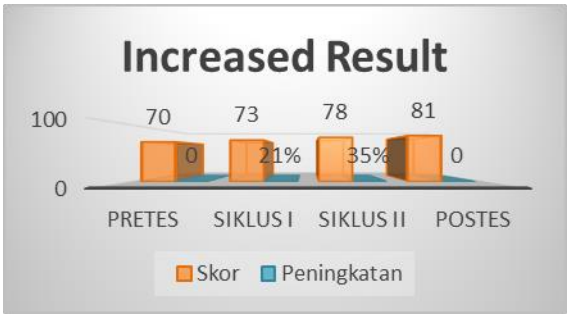
小川（1993：637）

"Reading" is to read and understand the contents of a sentence through letters. It begins with the correspondence between letters and sounds, and includes learning how to read and mean words composed of letters, and simply learning how to read and mean in large units of phrases, sentences, paragraphs, or contents.

It can be concluded that in understanding reading, we can start from knowing the words or vocabulary that appear and assemble them into a meaningful reading.

4. Result And Discussion

Data collection from this research was carried out 7 times. The first is a pre research to see how far the respondents understand the application that will be given. Then the end of each cycle a test is given to see the improvement that accurs. In this study the researchers set 2 meetings in each cycle. After each meetings, a reflection is carried out in the form of a test to see how far the respondents understand the material given. The results of the improvement obtained from research using mobile assisted language learning with the mazii and jareads applications are shown in the graph below:



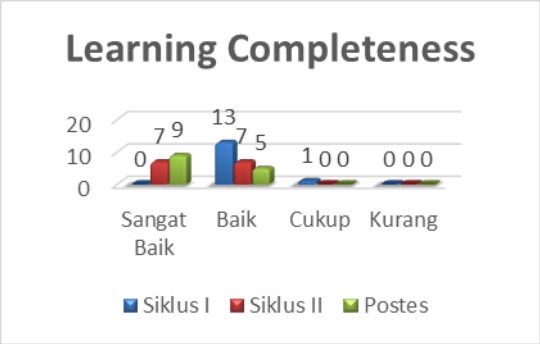
Graph 1. Increased Pretest to Posttest Score

Furthermore, the increase in score obtained by respondents from the initial test to the final test is described, as shown in the table below:

Catego-ry	Pretest		Cycle I		Cycle II		Postest	
	F	%	F	%	F	%	F	%
Very Good	0	0%	0	0%	7	50%	9	65 %
Good	13	93%	13	93 %	7	50%	5	35 %
Middle	1	7%	1	7%	0	0%	0	0%
Less	0	0%	0	0%	0	0%	0	0%

Table 1. Overall Result of Improvement in Each Cycle.

Complete learning from the beginning of the test to the end of the test, is presented in a graph, as below:



Graph 2. Overall Learning Completeness Value.

From the graph above, it can be concluded that each respondent has completed learning to read comprehension or *dokkai* through mobile assisted language learning with the mazii and jareads applications. There are no respondents who get a low score, the value of the criteria is sufficient in the second cycle and the posstest does not exist or is nil.

The validation process in this study was the *dokkai* team teaching teacher. Each question given is discussed and adjusted to the teaching plan each semester.

a. The Process of Improving Reading Comprehension Through Mobile Assisted Language Learning with Mazii and Jareads Applications.

The process of improving reading comprehension or *dokkai* learning in the *Nihongo Sougo Enshu* course from diagnosis before taking action, respondent has not used learning applications during online or offline. So that before carrying out the research, the researcher first explained the features contained in the application. Respondents in this study amounted to 14 people.

In the mazii and jareads applications, the readings used in this study are news features. To be able to understand the content of the news, the researcher gave the task to understand the news that was happening around the world or Japan, for example news about the covid pandemic. From reading these news respondents were asked to understand by expressing in their own language by entering it into the application.

In the implementation of the first cycle of action, respondents were asked to rephrase in their own language the readings given in the application. Two respondents used the results or answers of others in completing tasks in the mazii application. Because the learning was carried out online, the researcher could not fully observe because not all respondents turned on the camera during the teaching and learning process. In cycle II, the same event was not found.

Activities in cycle II, respondents were asked to answer questions 5 W 1 H (Where, when, why, what, who, and how) from the mazii and jareads application material. From the data sent using Japanese, it appears that the respondents have understood the simple news readings given in the application. The results of the 14 respondents also varied, they were able to work on their own and had developed self-confidence. In online learning, the problem is the signal. During the implementation of cycle I and cycle II, there were still respondents who came in and out of the zoom meeting room because the signal was not good.

Observations in this study, due to using the application it is not uncommon for respondents when they have difficulty not knowing new vocabulary, they immediately look for it on Google translate. The news reading in the given application is copied directly to google translate to search for its meaning. So do not understand the reading given.

The average increase in each cycle in this study was the average respondents pretest score of 70 points. In the first cycle of the first meeting 72 points, while in the second cycle of the first meeting it was 74 points. There was an increase of two points in the first cycle. The average score obtained by the respondents in the second cycle of the first meeting was 76 points.

The second meeting was 79 points, while in the final test they got 81 points. In the final test, all respondents were declared to have passed this course.

b. Result of Improved Reading Comprehension Through Mobile Assisted Language Learning with Mazii and Jareads Applications.

The improvement results obtained from research on reading comprehension through Mobile Assisted Language Learning with Mazii and Jareads Applications, are:

a. Online learning requires applications that can be accessed by respondents. Requires good hardware so that the teaching and learning process can take place well.

b. The mazii application has reading features from well-known news agencies. This application can be one of the media for learning Japanese. Reading comprehension lessons can be applied with this app. Because every reading in this application has a voice feature, so this application can also be used for listening. The jareads application also provides reading features from various fields, this feature can also be used for learning reading comprehension. In the reading feature, vocabularies are colored at each level so that students can understand and learn the vocabulary according to their level.

c. Online learning requires a good network for maximum use of the application. In this study, there were not many network constraints.

d. The material used in this research is in accordance with the ability of the respondents. The respondents lack of reading habits made the score not so good.

e. From the acquisition of respondents scores that have been described, there has been an increase, thus it can be concluded that through mobile assisted language learning with the mazii and jareads applications, respondents can improve their reading comprehension skills.

5. Conclusion

In research using this application there are several things that need to be considered: a good network or signal is absolutely necessary, hardware in the form of a good device or mobile phone is needed to be able to run the application, studying news readings contained in the application independently can improve reading skills comprehension, memorizing vocabulary from each reading area can increase the speed of understanding a reading. Practice readings material by not activating the *furigana* feature to get used to reading kanji, and not just simple news reading, and difficult must be studied consistently.

Furher research with application media on devices needs to be improved by making concrete assessments to get objective values. Assessment indicators need to be made such as by using an assessment rubric.

Independent application development in collaboration with people who have information technology skills can be a solution in increasing online learning.

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