4-2016

Effects of a timed dictation activity in the introductory course in Japanese focusing on the accuracy and fluency of writing Katakana

Aya Okada
Purdue University

**PURDUE UNIVERSITY
GRADUATE SCHOOL
Thesis/Dissertation Acceptance**

This is to certify that the thesis/dissertation prepared

By Aya Okada

Entitled
EFFECTS OF A TIMED DICTATION ACTIVITY IN THE INTRODUCTORY COURSE IN JAPANESE FOCUSING ON
THE ACCURACY AND FLUENCY ON WRITING KATAKANA

For the degree of   Master of Arts

Is approved by the final examining committee:

Atsushi Fukada
Chair

Colleen Neary-Sundquist

April Ginther

To the best of my knowledge and as understood by the student in the Thesis/Dissertation Agreement, Publication Delay, and Certification Disclaimer (Graduate School Form 32), this thesis/dissertation adheres to the provisions of Purdue University's "Policy of Integrity in Research" and the use of copyright material.

Approved by Major Professor(s): Atsushi Fukada

Approved by: Atsushi Fukada   4/18/2016

Head of the Departmental Graduate Program   Date

EFFECTS OF A TIMED DICTATION ACTIVITY IN THE INTRODUCTORY COURSE IN

JAPANESE FOCUSING ON THE ACCURACY AND FLUENCY OF WRITING KATAKANA

A Thesis

Submitted to the Faculty

of

Purdue University

by

Aya Okada

In Partial Fulfillment of the

Requirements for the degree

of

Master of Arts

May 2016

Purdue University

West Lafayette, Indiana

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my major advisor and committee chair, Dr. Atsushi Fukada for his continuous help throughout the entire process of my thesis. It would not have been possible to write this thesis without his excellent guidance. I also would like to thank Dr. April Ginther and Dr. Colleen Neary-Sundquist for being my committee members and providing valuable comments and suggestions.

I express a deep sense of gratitude to several people. Ms. Akiko Ohashi and Ms. Marina Ishii, coordinators for introductory Japanese classes, gave me opportunities to collect data from their classes. Also, my fellow teaching assistants, especially Saori Masumoto, helped my research and motivated me in my work.

I also owe a debt to Ms. Joyce L. Detzner, thesis format advisor, for prompt and accurate formatting advice, and further thanks to Travis Mahnke, Lauren B. Mallett and Ashlee J. Messersmith. Thank you for always being there when I needed advice.

Last but not least, I would like to thank my family for giving tremendous support and encouragement and being there whenever I needed help throughout the completion of my M.A. program at Purdue University.

TABLE OF CONTENTS

LIST OF TABLES

Table   Page

LIST OF FIGURES

ABSTRACT

Okada, Aya. M.A., Purdue University, May 2016. Effects of a Timed Dictation Activity in the Introductory Course in Japanese Focusing on the Accuracy and Fluency of Writing Katakana. Major Professor: Atsushi Fukada.

The importance of mastering one of the Japanese syllabaries, Katakana, is acknowledged by both Japanese as a foreign language (JFL) learners and teachers. Katakana is a phonetic syllabary that is used to transcribe loanwords primarily from European languages and onomatopoeia words. These loanwords are nowadays called Katakana words. The number of Katakana words in Japanese language has been increasing, and it is reported that many JFL learners in Japan often encounter difficulty in understanding these words. Though teachers are also aware of the importance of teaching Katakana, it is treated less importantly. For example, after spending some time and effort teaching Hiragana, the other primary syllabary, Katakana can be thought of as additional, and allocating some set amount of time during the class for Katakana teaching is challenging. In order to solve these current issues, the present study utilized the timed-dictation with the *timed-dictation player* (Fukada, 2015)*.* The goal of this study is to examine if this method has an effect to enhance learners' fluency and accuracy in writing Katakana. The subjects were 74 JFL learners in the Timed Dictation (TD) group, who had timed-dictation activities

through a semester, and 113 in the Written Test (WT) group, who had traditional

Katakana writing practices as a treatment. During the timed-dictation activities,

students were asked to transcribe an audio recording within a limited time frame.

The students were able to practice dictation on their own using *the timed dictation*

player before having the timed-dictation test during the class. At the end of

semester, an identical Katakana test was administered to both groups. It asked

students to convert as many Hiragana symbols into Katakana symbols as they can

within three minutes. The result showed that though the timed-dictation activity did

have a positive effect, the impact was insufficient for the TD group to achieve overall

higher Katakana writing proficiency than the WT group. Further analysis involving

the learners' first languages and questionnaire responses was also conducted. It is

found that the level of difficulty of dictation materials should be adjusted to the

learners' proficiency levels.

CHAPTER 1: INTRODUCTION

Motivation for the Study

There are three Japanese language scripts: Hiragana, Katakana, and Kanji. Igarashi (2007) defined them as follows: Kanji is a set of logographic/ideographic scripts; Hiragana and Katakana are both phonetic syllabaries. While Hiragana is often used in the ending of verbs, particles, auxiliary verbs and native Japanese words Katakana is used to transcribe loanwords, primarily derived from European languages. Those loanwords are called Katakana words.

The importance of Katakana practice is acknowledged by both JFL teachers and learners. First of all, the number of Katakana words used in Japanese society has been increasing based on the adoption of English words into Japanese society. Jinnouchi (2008) stated that 77.8% of JFL learners in Japan often or sometimes encountered difficulties in understanding Katakana words in their life due to a lack of Katakana knowledge. He also found that the learners' difficulty came from the current trends in teaching Katakana, such as teachers' attitudes and less time allocated for Katakana teaching. According to Igarashi (2007), not only native Chinese speakers and Korean speakers but also native English speakers experience difficulty in understanding Katakana words due to the pronunciation difference from the original English words.

Jinnouchi (2008) also compared students' perceptions of the difficulty of learning Katakana to that of Hiragana. Compared to 5.2% of students who thought writing Hiragana is difficult, 27.4% thought writing Katakana is difficult. According to Nakayama et al. (2008), this might be caused by the lack of balance between Hiragana and Katakana teaching. It was found that teaching Katakana is often treated as less important for several reasons:

- After spending time and effort teaching Hiragana, Katakana can be thought of as additional or ancillary.

- Since Hiragana is often introduced first, learning Katakana tends to be a burden on learners and becomes of secondary importance to teachers.

- Katakana is used less often in learning materials and therefore is easier for learners to forget.

- Preparing enough time for teaching Katakana is challenging for teachers.

The research conducted by Ann (2011) showed that even intermediate-level students are still confused with some Katakana and Hiragana, and still mix up Katakana symbols of similar shapes.

In order to change this current situation in Katakana teaching, Nakayama (2008) advocated a need for the needs of effective teaching methods and efficient learning materials. As a suggestion to fulfill these needs, dictation activities may be a suitable learning tool in language classrooms.

According to Stansfield, (1985), "dictation is one of the oldest techniques known for testing progress in the learning of a foreign language." Though dictation

had a negative reputation during the 19th century because of its association with the grammar translation method, it regained popularity in the end of 19th century. In the 20th century, following Oller's (1971) findings, which showed high reliability of dictation activity as a testing measurement, many other researchers conducted studies on dictation as a testing tool (Irvine et al., 1974; Stanfield, 1997; Jafarpur and Yamimi, 1993)

Sawyer and Silver (1961) also demonstrated the benefits of using dictation in language learning. Dictation can be used in any size class and can engage all students simultaneously. Also, students can realize where they could not hear while they were writing, and when they check their writing, they can see the errors. For example, they can listen to the audio again and review the sentence, or receive feedback from teachers. This will make students aware of their mistakes. Many studies, especially in English as a foreign language, concur that dictation can be beneficial as a learning tool to improve learners' language skill (Whitaker, 1976; Pappas, 1977; Morris, 1983).

Several studies feature the dictation activity as a teaching tool in Japanese language learning settings as well. Nakagome (1995) utilized dictation activities to focus on learners' listening abilities. As a conclusion, she reported positive comments from students about the incorporation of the dictation activities. Seventy-five percent (75%) of the subjects answered that dictation activities were useful. The questionnaire allowed multiple responses, and nine out of twenty students

answered that they learned to listen for the audio's meaning and context. Seven students said they became able to listen and comprehend details accurately.

Taguchi et al. (2013) incorporated peer-dictation activities in a JFL setting for four months. In this activity, learners first listened to the teacher's speech and individually reconstructed the text. And then, they discussed what they wrote in Japanese and finished reconstructing the original text together with their group members. At the conclusion of the experiment, learners were able to reconstruct the passages they heard more accurately than at the beginning of the experiment. Interviews with the subjects were also conducted. Overall, the students thought that peer-dictation activities were useful for JFL learners' listening and writing.

According to these research findings, it seems that dictation activities have benefits for JFL learners. However, some problems can be observed as well. First, the survey conducted by Nakagome reported students' positive attitudes towards dictation activities, and the responses from the interview by Taguchi shows peer-dictation was useful to improve listening and writing skills. However, Nakagome also pointed out that more contrivances are needed to minimize the time to spend on the dictation activities. Also, Taguchi et al. (2008) showed several comments from students regarding peer dictation, and found out some learners were not comfortable being relied upon by others. This suggests that more individualized and efficient dictation methods should be developed. In order to address these problems, the present study will suggest the incorporation of timed-dictation writing activities into a Japanese course.

During timed-dictation activities, students are asked to transcribe an audio recording within a limited time frame. As Nation (2009) stated, "As a teaching techniques, it helps language learning by making learners focus on phrase- and clause-level constructions. This focusing is accuracy based". During the dictation activities, students have to pay attention to each syllabary, which might lead to high accuracy. Also, the time that students can spend to write down sentences are limited in the timed-dictation activities, which is expected to raise learners' writing fluency. Since research on timed-dictation in a JFL setting is limited, this study will further examine its effects.

In order to incorporate timed-dictation activities into the Japanese language classroom, a web program *Timed dictation player* (Fukada, 2015) was utilized. Students obtained access to the web resource and practice dictation activities prior to timed-dictation during class. The web resource also gives students optional choices for randomization and pause duration so that students can adjust the material to their own level as part of their practice.

Research Question

After reviewing previous studies and considering the current trend in Japanese teaching for JFL learners, it is obvious that Katakana is nowadays an important curricular element due to the increasing number of Katakana words in Japanese society. However, teaching Katakana is often treated as less important because Hiragana is often introduced first, learning Katakana tends to be a burden on learners and becomes of secondary importance to teachers. Also, securing

enough time for teaching Katakana is challenging for teachers. Timed-dictation can

be an effective tool for improving students' writing skills, especially when it is

provided online, as it then is not limited by time or location and is more efficient.

In this study, the research question is as follows: do timed-dictation activities

utilizing the *Timed dictation player* improve JFL learners' Katakana writing abilities?

CHAPTER 2: LITERATURE REVIEW

Overview

The goal of this study is to examine the effectiveness of a timed dictation activity for improving Japanese language learners' Katakana writing abilities. This chapter presents an overview of Japanese Katakana scripts and the importance of Katakana, followed by reviews of relevant previous studies covering such topics as the difficulty of learning Katakana, the current climate for teaching katakana, teachers' attitudes towards Katakana, the use of the dictation activity, the use of dictation in Japanese language settings, the incorporation of technology, and related CALL (Computer Associated Language learning) materials.

Japanese Language Scripts

There are three types of Japanese language scripts: Hiragana, Katakana, and Kanji. Igarashi (2007) defines them as follows: Kanji is a set of logographic/ ideographic scripts; Hiragana and Katakana are both phonetic syllabaries. Hiragana symbols were formed by simplifying Chinese characters, and they generally have rounded shapes. Katakana was also developed in part out of Chinese characters. Katakana syllabaries have angular shapes with straight, simple lines.

Hiragana and Katakana are both syllabary systems which transcribe all Japanese syllables. For each syllable, there is a Hiragana symbol and a Katakana symbol. (See Table 1).

Table 1: The Japanese Syllabary (Hiragana / Katakana)

	w	r	y	m	h	n	t	s	k	
ん/ン n	わ/ワ wa	ら/ラ ra	や/ヤ ya	ま/マ ma	は/ハ ha	な/ナ na	た/タ ta	さ/サ sa	か/カ ka	あ/ア a
		り/リ ri		み/ミ mi	ひ/ヒ hi	に/ニ ni	ち/チ ti(chi)	し/シ shi	き/キ ki	い/イ i
		る/ル ru	ゆ/ユ yu	む/ム mu	ふ/フ hu	ぬ/ヌ nu	つ/ツ tu(tsu)	す/ス su	く/ク ku	う/ウ u
		れ/レ re		め/メ me	へ/ヘ he	ね/ネ ne	て/テ te	せ/セ se	け/ケ ke	え/エ e
	を/ヲ wo	ろ/ロ ro	よ/ヨ yo	も/モ mo	ほ/ホ ho	の/ノ no	と/ト to	そ/ソ so	こ/コ ko	お/オ o

A Japanese syllable consists of a consonant and a vowel. There are syllabaries with voiceless consonants and those with voiced consonants. An example of the former is さ (Hiragana) and サ (Katakana) both representing the [sa] sound. An example of the latter is ざ (Hiragana) and ザ (Katakana) both representing [za]. Notice the use of the diacritic marker ゛ which signifies voicing. The voiceless and voiced symbols share the same base symbol.

Table 2: The Japanese syllabary (Voiced consonants)

b	d	z	g
ば/バ ba	だ/ダ da	ざ/ザ za	が/ガ ga
び/ビ bi	ぢ/ヂ ji(di)	じ/ジ zi	ぎ/ギ gi
ぶ/ブ bu	づ/ヅ zu(du)	ず/ズ zu	ぐ/グ gu
べ/ベ be	で/デ de	ぜ/ゼ ze	げ/ゲ ge
ぼ/ボ bo	ど/ド do	ぞ/ゾ zo	ご/ゴ go

Additionally, there are syllables with palatalized consonants, such as [kya] and [nya]. These syllables are transcribed with two syllabary symbols. For instance, the syllable [kya] is written with the symbol for [ki] き followed by a small version of [ya] や, which looks like きゃ.

Table 3: The Japanese Palatalized Series of Syllables

r	m	h	n	t	s	k
りゃ/ リャ rya	みゃ/ ミャ mya	ひゃ/ ヒャ hya	にゃ/ ニャ nya	ちゃ/ チャ tya	しゃ/ シャ sya	きゃ/ キャ kya
りゅ/ リュ ryu	みゅ/ ミュ myu	ひゅ/ ヒュ hyu	にゅ/ ニュ nyu	ちゅ/ チュ tyu	しゅ/ シュ syu	きゅ/ キュ kyu
りょ/ リョ ryo	みょ/ ミョ myo	ひょ/ ヒョ hyo	にょ/ ニョ nyo	ちょ/ チョ tyo	しょ/ ショ syo	きょ/ キョ kyo

While Hiragana is often used in the ending of verbs, particles, auxiliary verbs, and words originating from Japan, Katakana is used to transcribe loanwords from European languages (Loanwords from Chinese are written in Kanji). The loanwords from European languages are nowadays called Katakana words (Torikai, 2007). For

instance, the Katakana word for coffee is コーヒー (coohii); party is パーティー (paatii).

The Importance of Katakana

Although Hiragana scripts are fundamental, Igarashi (2007) showed that the number of Katakana words in the Japanese language is rapidly increasing. Igarashi explained that the Japanese government has been concerned about the increasing number of loanwords, and accordingly established a "Loanword Committee" to investigate the proliferation of Katakana words. Aside from the government, Japanese speakers themselves are also aware of this growth in the number of loanwords. Mass media sources such as newspapers, magazines, and television commercials also often contain newly-developed loanwords. Igarashi suggests that Katakana words adopted from English in particular have become more common among Japanese speakers. Jinnouchi (2008) conducted a survey of teachers and students at 198 Japanese teaching institutions. Forty-nine point seven percent (49.7%) were native Chinese speakers, twenty-three point two percent were native Korean speakers, and 4.2% were native English speakers. The survey consisted of 24 questions related to learners' attitudes towards studying Katakana symbols and Katakana words. Jinnouchi's study found that 77.8% of students who studied Japanese in Japan often or sometimes encountered difficulties in understanding Katakana words in their life due to a lack of Katakana knowledge.

As will be discussed later in this chapter, the students' difficulties may be the result of the current trends in Katakana teaching such as teachers' attitude and less

time allocated for Katakana teaching. These current situations are a part of the reason why 71.8% of native Chinese speakers and 45% of native Korean speakers seek for more Katakana lessons in the class (Jinnouchi 2008).

Since many loanwords are derived from English, Katakana words tend to come easily to native English speakers. However, according to Igarashi (2007), JFL learners whose L1 is English also experienced difficulties in understanding Katakana words due to the pronunciation differences from the original English words.

Thus, regardless learners' first languages, the importance of learning and teaching Katakana can be seen from these responses.

The Difficulty in Learning Katakana

Jinnouchi (2008) conducted a survey of teachers and students at 198 Japanese teaching institutions, and reported that many students who studied Japanese for a year reported they are not confident about writing Katakana. Four point six percent (4.6%) of the students felt writing Katakana is "very difficult"; 22.8% of them felt it is "difficult." The reason why they felt difficulties was also asked. It was because those Katakana words do not exist in some subjects' native languages, and are hard to predict the meanings. Also, the way Katakana words are pronounced is different from the way original English words are pronounced. Therefore, even some native English speakers are confused with some Katakana words. It is hard for JFL learners to perceive and write out Katakana words by listening, and they eventually have to memorize those words by sight.

Nakayama et al. (2008) conducted a survey of 211 Japanese language instructors, and 479 JFL learners in 62 Japanese language institutions. The survey demonstrates the difference in difficulty between writing Hiragana and writing Katakana. Five point two percent (5.2%) of 479 JFL learners answered that writing Hiragana is "very difficult" or "somewhat difficult." On the other hand, 27.4% of the students said that writing Katakana is "very difficult" or "somewhat difficult." These results confirm that JFL learners' experience more difficulty in writing Katakana than writing Hiragana. Nakayama concluded this is because of a lack of balance between Hiragana and Katakana teaching, as will be discussed later in this chapter.

Ann (2011) found that students have trouble accurately writing Katakana, even at the intermediate and advanced levels. Ann conducted research with 58 intermediate JFL learners and 53 advanced JFL learners on Katakana transcription in Japan. She had the students dictate 20 Katakana words, such as センター (center/sentaa) and クラブ(club/kurabu). The mean percentage scores were 27.4% (Intermediate level) and 73.4% (Advanced level). The types of mistakes on katakana symbols can be categorized as follows: based on the similarity of the shapes between the Katakana symbol and the corresponding Hiragana, and the similarity of the shapes between a Katakana symbol and another Katakana symbol. Among the mistakes due to a similarity between Katakana and Hiragana, two students wrote Hiragana "せ(se)" instead of Katakana "セ(se)" for the word "センター (center/sentaa)", and "がス(Hiragana-ga su)" for "ガス(ga su/gas)" and "レべる(re be Hiragana-ru)" for "レベル(re be ru/level)". Among the mistakes due to the

similarity between two Katakana symbols, there were one student who wrote "ワ (wa)" instead of "ク (ku)" and "ル(ru)" instead of "レ(re)". It is obvious that intermediate level students still confuse Katakana and Hiragana, and particularly in the case of Katakana symbols with similar shapes. It is taken for granted that intermediate level JFL learners should be able to write Katakana perfectly, but Ann's study shows that intermediate level JFL students still write Katakana incorrectly on the syllabary level.

The Current Trend in Katakana Teaching

      Katakana in the textbooks.

      Students of Japanese learn the Katakana syllabaries in a beginning level Japanese course. The point at which these syllabaries are introduced varies from one curriculum to another, and from one textbook to another. Some schools introduce them during the very first stage of beginning Japanese; other schools may wait as long as one year before they introduce the syllabaries (Hatasa, 1991).

      In order to examine how Katakana words and scripts are treated in each textbook for JFL learners, Igarashi (2007) used the research data by The Japan Foundation, and showed how many Katakana words (compared to Kanji and Hiragana words) are used in textbooks, and how textbooks address Katakana script and issues relevant to Katakana words. In the five textbooks for beginners, Katakana words account for 16.84%, Kanji words 62.6%, and Hiragana words 20.56%. As a reference, the textbook *NAKAMA* (Hatasa et al., 2010) was selected for the present study because it is used in the study participants' courses. The percentages of the

three word types in the textbook *NAKAMA* were 16.1% (Katakana), 65.3% (Kanji) and 18.6% (Hiragana). It can be observed the percentages of Katakana and Hiragana uses in the textbook are almost the same.

Nakayama et al. (2007) completed a comparative study of the percentage of Katakana words that appear in JFL textbooks and magazines published in Japan. The National Institute for Japanese Language and Linguistics reported that the percentage of Katakana words in 70 magazines published in 1994 was 34.8%. Conversely, the percentage of Katakana words in the textbooks was: 11.9% in 29 beginner-level textbooks, 11.3% in 7 beginner-intermediate textbooks, 8.6% in 13 intermediate textbooks, 6.3% in 8 intermediate-advanced textbooks, 6.3% in 3 advanced textbooks. The lower-level textbooks include more Katakana words, but still do not compare to 34.8% Katakana used in magazines.

Ann (2011) pointed out that although the interest in Katakana words has been increasing in Japan, this shift is not reflected in Japanese language classes. The amount of time that teachers spend on incorporating Katakana is relatively short, and it can be said that Katakana is considered less important than Hiragana and Kanji.

Jinnouchi (2008) also stated that proper Katakana learning should be an objective in introductory Japanese courses. From his survey, which was conducted with teachers and students at 198 Japanese teaching institutions, he found that students are motivated to learn Katakana words properly, but the current curricula do not meet their expectations. Regardless of their native languages, 59.3% of the

participants in Jinnouchi's survey desired more Katakana practice and lessons. If teachers fulfill these learners' expectations, the students might become more motivated to master Katakana.

Teachers' attitudes towards Katakana.

One of the survey questions in Jinnouchi (2008) was, "When you teach Katakana syllabaries in your institution, what kind of learning objectives do you set?" Out of the 58 institutions which responded to the survey, 58.3% of the institutions answered "To achieve the same extent as the Hiragana on writing and reading," 16.7% chose "Students don't have to be able to write them, reading is enough," and 12.5% responded "There is no specific goal." In other words, over 40% of the institutions think "The Katakana writing ability does not have to be the same extent as Hiragana writing ability."

Table 4: "When you teach Katakana symbols in your institution, what kind of goal do you lay out?" (Nakayama et al., 2008)

Responses	Number of institutions	%
"To achieve the same extent as the Hiragana on writing and reading."	28	58.3
"Students don't have to be able to write them, reading is enough."	8	16.7
"There is no specific goal"	6	12.5
"Depends on learners' needs" "Do not ask for the same extent achievement as the Hiragana, but aim that only for the well-used vocabularies."	6	12.5

Moreover, to the question "Do you believe you provide sufficient instruction in Katakana?", 46.6% of the instructors responded they did not teach enough. Eighty

percent (80%) of that sample said they did not have enough time to spend on

teaching or practicing Katakana with their students. Even though instructors are

aware of these problems, Nakayama pointed out that it is not easy to increase

Katakana practice time. According to Nakayama, Katakana teaching is treated as less

important because:

1. Some instructors think Katakana does not have to be taught to the same

   extent as Hiragana.

2. The time necessary for Katakana practice is not available in the curricula.

3. Efficient teaching materials have yet to be developed.

Therefore, Nakayama suggested that effective teaching methods and materials

should be developed.

Dictation Activities

    Definition of dictation.

According to Nation (1991), "Dictation is a technique in which learners

receive some spoken input, hold this in their memory for a short time, and then

write what they heard." This method is often used in language courses to foster

good listening and writing skills and to assess learners' proficiency. "Dictation

allows the language learner to comprehend and reproduce the language within the

context of meaningful discourse" (Jafarpur and Yamini, 1993). Also, studies show

that "dictation is most effective when it involves known vocabulary presented in

unfamiliar collocations and constructions" (Nation, 1991). While composition is a

similar type of writing activity, "dictation enables the subject to produce utterances

that are both syntactically well-formed and semantically acceptable" (Jafarpur and Yamini, 1993).

Dictation as a testing tool.

As Stansfield (1985) claims, dictation is one of the oldest techniques for testing learners' progress in a foreign language. Natural method researchers rejected dictation during the late-nineteenth century due to its similarity to the grammar translation method. However, dictation regained popularity when the direct method was proposed at the very end of 19th century. At the beginning of the 20th century, dictation was used in standardized tests of modern languages along with the regular written examination on grammar. Oller (1971) conducted research on incorporating dictation into the English as a Second Language Placement Examination at UCLA. He examined the correlation between dictation and the other content areas of the examination, such as vocabulary, grammar, composition, and phonology, as well as total score. The results showed that there is a strong correlation between the results of dictation and the other measures of proficiency. Oller concluded, "the dictation clearly seems to be the best single measure of the totality of English-language skills being tested" (p. 255). Following Oller's findings, some other researchers studied dictation as a testing tool and found that there is a strong correlation between dictation and integrative language proficiency test, such as The Test of English as a Foreign Language (TOEFL) and traditional discrete-point tests administered by the UCLA English Language Institute Placement Battery (Irvine et al., 1974; Oller and Streiff, 1975; Jafarpur and Yamimi, 1993).

Dictation as a learning tool.

Whitaker (1976) stated "wherever aural comprehension is prized, together with literacy and ability to read the FL, dictation may be found to be both profitable for teaching, and valid for testing" (p.92). Dictation can also be incorporated as a learning tool in language classes. It has been shown as an asset to improve learners' listening skill (Sawyer and Silver, 1961; Pappas, 1977), and regarded as a tool to improve learners' listening and writing (Morris, 1983). Sawyer and Silver (1961) presented several benefits of text dictation for both teachers and students.

The benefits for teachers: (p.40)

● "Dictation can be used with a class of any size. During the time the dictation is given all of the students are working, not just one or two."

● "The teacher is able to identify and correct a maximum number of different problems in a minimal time."

● "If the class consists of students whose native languages are not the same, the dictation will uncover and force the correction of different types of errors for students with different language backgrounds."

The benefit for students: (p.41)

● "He gets practice in writing. For some students, particularly those whose native language uses a radically different written symbolization, practice in penmanship is actually necessary. The student is forced to correct writing errors and confusions."

Dictation Types

      Graduated dictation.

      Cziko (1981) identified problems with dictation in terms of the ways it is conducted and scored. "It requires considerably more time and care to score than most other tests requiring written responses (e.g., multiple-choice tests of grammar and cloze tests) if each individual word is to be scored right or wrong" (p.369). Instead, Cziko suggested a new style of scoring dictation segment by segment. In his research, passages of 130 words were prepared and sorted into 14 segments. The length of each segment varied from 2 to 21 words, starting with shorter segments and progressing towards longer segments. The number of words in each segment were 2, 4, 4, 6, 5, 8, 8, 7, 10, 10, 13, 14, 16, and 21. The dictation test audio was recorded and played three times: first using a normal speed, secondly using several pauses and thirdly by inserting pauses after each sentence. Also, scores were calculated via three different evaluation systems:

1) 130 words as separate items with appropriate-spelling, which means spelling errors were not counted as wrong unless "it showed lack of phonological or lexical knowledge" (p.371);

2) 14 segments as items with appropriate spelling;

3) 14 segments with exact spelling.

The results of this study indicated that the exact-spelling scoring system (3) did not drastically decrease scores compared to the appropriate scoring systems (1) and (2), despite the rigorous spelling criteria of the third scoring system. Also, the reliability

of all three scoring methods was computed using the Kuder-Rechardson 20 formula. The result showed that the exact word scoring system has slightly higher reliability than two segment-scoring system. Cziko stated that "no significant reliability is lost in scoring the 14 segments as opposed to scoring all 130 words" (p.372).

Table 5: Descriptive Statistics of the study in Cziko (1981)

Scoring method N=102	Mean	Standard deviation	Reliability
130 words appropriate-spelling	77.50	35.32	0.98
14 segments appropriate-spelling	4.78	4.14	0.92
14 segments Exact-spelling	4.70	4.21	0.93

Cziko also stated that the "the scoring procedure was three or four times faster than an appropriate-spelling, word-by-word scoring system" (p.378). He advocated the use of the segmented scoring system with exact spelling, which was later called "graduated dictation."

Kaga (1991) incorporated graduated dictation into Japanese language classes in order to examine if students with three different proficiency levels will score differently on the dictation test. Two test passages were given to 78 students. The passages were divided into 18 chunks and segments consisting of 1 to 14 words (See Appendix). Passage 1 contains 104 words and Passage 2 contains 105 words. During the dictation test, the audio was played three times: first, the entire passage was read at normal speed without pauses; secondly, the passage was read chunk by chunk; thirdly, it was read sentence by sentence. Two types of grading systems were

applied. The first was exact-word: "If all of the words are written with the exact spelling and in the correct order, the unit is assigned one point" (p.116) The other grading system used was acceptable-word: "If a spelling error does not cause any misinterpretation," and "if a change in a unit is syntactically correct and does not have different meaning from the original" (p.116), the unit is assigned one point. The results showed that the difference between the three proficiency levels was large, and that graduated dictation can be utilized to distinguish JFL learners based on their proficiency level. She concluded that "when some reasonable modifications are applied, dictation is an adequate and efficient measure of proficiency levels for learners of languages which have a good fit between pronunciation and orthography" (p.121). Since Katakana's pronunciation and orthography are closely connected, graduated dictation might be an effective tool for assessment with high reliability for Katakana symbols as well; however, there is a lack of research examining the effect of dictation as a learning tool. It has not yet been investigated if the graduated dictation has an effect as a learning device.

Peer dictation.

As an example of peer dictation, Taguchi et al. (2013) conducted research targeting intermediate Japanese learners. During this activity, teachers read a text consisting of approximately 200 words twice. Learners listened to the teacher's speech and individually reconstructed the text as they listened. After listening twice, the teacher split students into groups of 2-3. Then learners discussed what they wrote in Japanese and reconstructed the original text together. This procedure took

30-40 minutes total, and this activity was conducted four times every week for the duration of four months. According to the pre-test and post-test results, learners were able to reconstruct 44 % of the text in the pre-test, and 92% of the text in the post-test. Though the peer dictation materials used during the semester varies depending on the chapter, the pre-test and post-test were identical. Therefore, it can be assumed that the gain of 48% is attributed to a practice effect. In interviews with the learners, Taguchi found that peer-dictation was useful not only for listening and writing, but also for the verification of grammar, vocabulary and Kanji writing. While Taguchi explained that dictation improves learners' overall language ability, it is unclear how dictation works for each specific language skill, and this should be examined in the future research.

Timed dictation.

The timed dictation method requires that instructors give students a limited amount time to write down what they heard. Learners are encouraged to write down sentences as quickly as possible.

Sawyer and Silver (1961) conducted dictation activities for three days. On the first day, after the dictation activity, papers were marked by teachers where students made mistakes, but not corrected. During the second day, students could see their marked paper while dictating for the second time. After their paper was collected by the teachers, dictation scripts were given. On the third day, teachers expected students to turn in their perfect work. In this way, "dictation forces the student to be aware that, if he is making errors, only he can correct them. The

teacher or the dictation can make him aware of his errors, but he has to correct them himself"(p.41). This was also supported by Nation (2009): "As a teaching technique, it helps language learning by making learners focus on phrase- and clause-level constructions. This focusing is accuracy based" (p.12). In order to be aware of the mistakes, students have to pay attention to each syllabary, which might lead to high accuracy. Considering these points of view, timed dictation can be an effective way to acquire writing fluency and accuracy on the syllabary level. Since research on timed dictation is limited, this study will further examine its effects.

The Use of Dictation in Japanese Language Settings

The research reviewed above mostly feature dictation activities in English as second languages courses, but not many in Japanese language settings. In this section, two research studies on dictation in Japanese language settings are reviewed.

Nakagome (1995) reviewed several studies to explain how dictation can be effectively utilized as a learning tool, and introduced a methodology for incorporating dictation activities into a listening class. She utilized dictation activities in a joint listening class which included intermediate and advanced exchange students. During the 45-minute class, dictation audio was played three times. First, students listened to the entirety of the audio; second, they listened to a version with several pauses appropriately inserted; finally, they listened again and reviewed their answers by themselves. After the activity was conducted, the instructor collected their writings and distributed the correct answers. The students

were asked to underline where they thought they made mistakes so that students would be aware of the reason why they could not comprehend the parts. Upon the completion of the dictation activities, Nakagome conducted a survey. She received positive feedback from many students: 75% thought the dictation activity was useful. Their reasons were reported as follows:

Table 6 : The reason why students thought dictation was useful. (Nakagome et al., 1995)

Comments	Number of students
Learned to listen for the audio's meaning and context.	9
Became able to listen and comprehend details accurately.	7
Became used to listen to Japanese language	6
Became able to learn new words and expressions	6
Learned to listen and predict the audio's content.	5

As introduced earlier, Taguchi et al. (2013) conducted research on peer dictation in a Japanese language setting. They found that peer-dictation can be useful for listening and writing as well as for verification of grammar, vocabulary, and Kanji writing. However, the dictation activity took 30-40 minutes and was conducted four times a week. The entire dictation activity process requires that instructors set aside considerable amounts of class time. Therefore, it is difficult to regularly incorporate the dictation activities into class time. Also, responses such as "I tend to rely on other students and did not think much by myself," and "I felt I was relied on too much by other group members" were provided in the interview. More individualized and efficient dictation methods should be developed. In order to address these problems, technology might be utilized for the class dictation activity.

The Incorporation of Technology

Each language learner has their own learning styles, and their expectations also vary. Responding to each students' request becomes difficult in a classroom setting. If the teacher caters to students with high proficiency, that will leave low proficiency students behind. Conversely, when the teacher adjusts their teaching to students with lower proficiency, that will discourage high proficiency students. Considering these points, although adjusting to each student's needs is desirable, it is not easy to do in a traditional classroom setting. Therefore, blending CALL (computer-associated language and learning) materials and classroom teaching makes sense, since CALL allows learners to study according to their own preferences and at their own pace (Otsubo, 1992; Kuwabara, 2008). Providing learning materials through a web-based online resource, in particular, gives learners access regardless of time and location. The reach of such a program is also international. (Hamada et al., 2004; Banno et al., 2003).

Related CALL Materials

Kuwabara et al. (2008) developed dictation materials that focus on Katakana words called "Katakana Dictation Kaitemiyo," which are accessible online. On the screen, learners see a chart of all Katakana symbols. When learners click the "Voice" button, they will hear a word read aloud. Then, learners are expected to select the appropriate Katakana symbols in the right order by clicking the symbols in the chart. Those selected Katakana symbols are shown on the bottom of the screen.

Figure 2: Screen shot of Katakana Kaitemiyo (Kuwabara et al., 2006)
Used with permission

Once learners finish choosing Katakana symbols to make the word as it is

pronounced, they can click the "Check" button to see if the constructed word is

correct.

This material helps learners match each sound and Katakana symbol. As long

as they recognize each symbol, they are not required to actually write Katakana

symbols. Therefore, this will encourage learners to recognize Katakana symbols

with sounds, and it will be effective as a tool for practicing Katakana recognition.

However, according to research conducted by Ann (2011), intermediate level

students still confuse Katakana and Hiragana, and specifically Katakana symbols of

similar shapes. The material developed by Kuwahara et al. does not solve the issues

that Ann pointed out. If instructors expect students to not only construct words but

also write Katakana symbols correctly, a different kind of Katakana writing practice is necessary.

Ogawara and Takahashi (2013) incorporated dictation activities into an intermediate listening class by distributing material online. They explained dictation would yield inconsistent results if all learners complete dictation at the same time because learners' abilities vary. Therefore, an individual dictation activity was conducted in this class. First, audio materials containing five sets of conversations and 10 different sentences of were played in the class at once, and students answered prepared comprehension questions. The activities are called dictation quizzes. When they were finished, students brought their quizzes to the instructor to receive feedback. Second, students accessed the website and downloaded the audio onto their computers. Then they wrote down the sentences by first listening to the audio as many times as they wished. Third, the audio transcripts were distributed and students corrected their writings by looking at them. Finally, students practiced repeating and shadowing until they were able to repeat the sentences without looking at the transcripts. This process was incorporated into a 90-minute class session every week for 15 weeks. Ogawara and Takahashi explained that in the beginning there were some students who could not write long sentences at all, but with practice students were able to write more sentence parts. Some students reported that they were able to listen to and comprehend the audio better than before. This suggests that these dictation activities using uploaded audio

had an effect, although the evidence was students' self-report, and not even the number of students wasn't reported.

These activities were conducted with an intermediate listening class and required 90 minutes every week for 15 weeks. Unfortunately, it would be difficult and would likely be impractical to devote this much time in ordinary language classes. Considering these realities, *Timed dictation player* (Fukada, 2015) was utilized in the present research.

Timed Dictation Player

Using this web program, students are able to listen to uploaded audio and practice writing as many times as they wish. The students are allowed to select their preferred length of pause on the *Timed Dictation player.* Since students' use of the resource is not limited by the time of day or location, which is more efficient and adjustable to individual learning styles (Hamada et al., 2004). This approach to learning supports students' autonomous learning outside of class, as suggested by Kuwabara et al. (2008). Therefore, a possible tool for effective Katakana practice can be the timed-dictation activity utilizing *the timed dictation player*.

In the present study, the effect of Katakana writing timed-dictation activities that utilize this web program will be discussed.

CHAPTER 3: METHODOLOGY

Overview

This study examined whether a timed-dictation activity is an effective learning tool for improving JFL learners' Katakana writing ability.

During the timed-dictation activity, students listened to prepared audio files and wrote down the sentences they heard within a limited amount of time. This activity was conducted with experimental group 1 (TD group), and traditional Katakana writing activities were given to experimental group 2 (WT group).

At the end of the semester, an identical Katakana test which measures learners' writing accuracy and fluency was administered to both experimental groups. The results of the Katakana test were compared between the groups to examine the effectiveness of each treatment. Figure 3 shows an overview of the study design.

	Experimental Group 1 (TD group)	Experimental Group 2 (WT group)
Chapter 2.5	Timed-dictation 1	Katakana activity 1
Chapter 3	Timed-dictation 2	Katakana activity 2
Chapter 4	Timed-dictation 3	Katakana activity 3
Chapter 5	Timed-dictation 4	Katakana activity 4
Chapter 6	Timed-dictation 5	Katakana activity 5
	Limited-time Katakana test	
At the end of the semester	Questionnaire	

Figure 3. Overview of the Present Study

Participants

Demographics.

The participants were students enrolled in Japanese 101 during the fall 2015 semester at Purdue University. The Japanese 101 curriculum introduces students to Hiragana first, followed by Katakana. In order to examine their Katakana writing achievement, first-year Japanese classes were chosen rather than higher level classes to control the variable of prior learning. The TD group consisted of 74 students in five sections of Japanese 101, and the WT group consisted of 113 students in eight sections. All participants were between 18 and 22 years of age. For

further demographics, see Table 7 and Table 8. Also, the data of students who had

previous learning experience was eliminated from the study.

Table 7: Demographics of Experiment Group 1 (TD)

TD group (n=74)			
Gender		First Language	
M	42	Chinese	56
		English	14
		Urdu	1
F	32	Korean	1
		Spain	1
		Thai	1

Table 8: Demographics of Experiment Group 2 (WT)

WT group(n=113)			
Gender		First Language	
M	71	Chinese (include Taiwanese)	85
		English	22
		Korean	2
		Spanish	1
F	42	Thai	1
		Polish	1
		Russian	1

Curricular differences between the TD and WT groups.

The timed-dictation activity was conducted with the TD group, and Katakana

writing activities were provided via study guides to the WT group. More details

about these treatments are explained in the Treatment section.

In addition to these treatments, both groups had five Katakana quizzes near the

beginning of the term, following the introduction of Katakana. Also, in both groups,

workbook assignments (from the Student Activity Manual) were assigned several

times throughout the semester. Chapter 2.5 of the workbook includes Katakana writing practice that requires students to copy the example for each Katakana syllabary 10 times. The rest of the chapters (Ch. 1-Ch. 6) of the workbook mostly feature grammar practice though Katakana writing is sometimes embedded in grammar questions.

Treatments

The timed-dictation activity was conducted with the TD group. During the timed-dictation activity, students listened to the prepared audio files and wrote down the sentences they listened within a limited amount of time. The students practiced the timed-dictation on their own before having the timed-dictation tests during the class. timed-dictation tests were given six times through the semester as a part of the chapter test. The TD student group received a performance-based test at the end of each chapter as a chapter test. The performance-based test was administered using *Speak Everywhere* (Fukada, 2013), a video-based oral training computer application. The students were provided a link to log in to the application. Once logged in, the students select a chapter in order to complete the test task (See Figure 4).

Figure 4. Example of Test tasks Screen Capture from Speak Everywhere Developed by Atsushi Fukada. Used with permission.

When students select a certain Chapter the practice options are displayed (Figure 4). Students follow the instructions on the screen (Figure 5), record their responses, and then submit their audio recordings. Then, instructors listen to the submitted audio to provide feedback to the students. The students are supposed to complete all assigned tasks for the test. Though Chapter 2 focuses on Katakana practice according to the curriculum, not all exercises for Chapter 2 are Katakana-oriented. The other chapters focus on new vocabulary practice, grammar pattern practice, and conversation practice, which contain some Katakana words in the sentences.
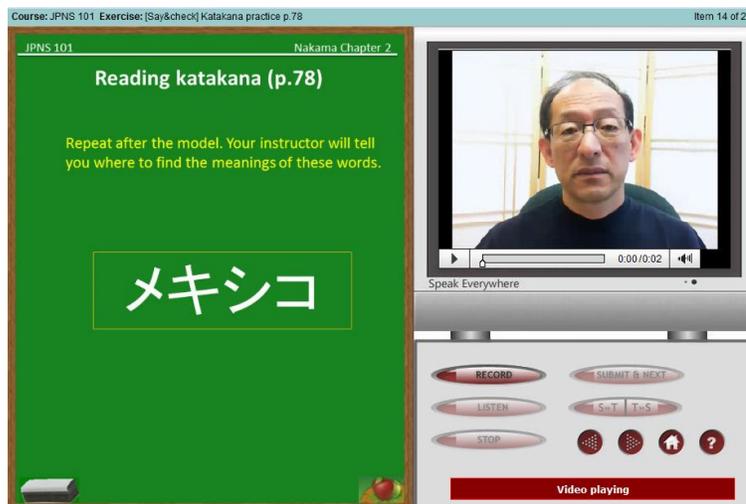
Figure 5. An example Katakana reading exercise. Used with permission.

In the WT group, students did not participate in dictation activities; instead, Katakana writing activities were provided via study guides before each test, which gave students opportunities to practice Katakana. Students were given approximately 1-6 Katakana words as a writing practice for each chapter; students were asked to transcribe English words into Katakana words or vice versa. These study guides were developed to prepare students for each chapter test. Also, the Chapter tests were pencil-and-paper-based tests proctored in a classroom and created for the purpose of testing students' overall language proficiency.

Materials

Practice dictation activity.

Two kinds of dictation scripts were created: a practice version and a test version. The practice version was prepared for student practice and the test version was prepared for the dictation activity portion of the chapter tests. The practice

version contained 15 sentences covering the key grammar points of each chapter. However, timed-dictation 1 (Ch. 2.5) featured only five sentences for both the practice and test versions because the chapter had very few new grammar points.

Dictation test.

For the test version of the dictation activity, 10 out of the 15 sentences on the practice version were selected. Therefore, the audio files for the test versions were created separately. The Katakana symbols covered in the practice versions of the timed-dictation activities and in the Katakana practice in the study guide are listed in the Appendix.

Sentence creation.

The dictation activities were administered sentence by sentence, and included as many Katakana syllabaries as possible. Due to the restriction that the sentences needed to contain new grammar points, it was not possible to exhaustively incorporate all Katakana symbols. Accordingly, seven of 46 Katakana syllabary symbols did not appear in the dictation sentences (See Appendix). Also, all vocabulary items in these dictation sentences were selected from Chapter 2.5 through Chapter 6 of the textbook used in the Japanese 101 course: *Nakama 1 Introductory Japanese: Communication, Culture, Context* (Hatasa, Hatasa & Makino, 2014). These sentences were typed into text files so that instructors were able to share the files with students for their own practice. In this thesis, such text files will be referred to as dictation script files.

Timed-dictation audio files.

Following the creation of the timed-dictation scripts, audio recordings were also prepared for the activity. In order to create timed-dictation audio files, native Japanese speakers read the script sentences aloud. The pauses between the sentences needed to be controlled, so the web resource *Timed dictation player* (Fukada, 2015) was utilized. Once instructors upload audio files, they are able to segment them into sentences and specify pause durations using this resource (See Figure 6).

Edit an existing timed dictation activity

Instructions: Edit the form and submit.

Editing: JI02_Ch3_Test

	BEGIN	END	PAUSEI	PAUSE2
I	0	1.8	12	12
2	2.1	4.8	27	27
3	5.2	9.0	15	15
4	9.2	11.5	21	21
5	11.6	14.3	16	16
6	14.6	16.8	18	18
7	17.0	19.5	11	11
8	19.9	22.3	13	13
9	22.5	24.7	13	13
I0	24.8	27.7	13	13
II				

Figure 6. Activity creation example using *the timed dictation player web resource*

This web program plays the audio files, repeating the recording once following the designated pause time. For example, item 1 of the dictation activity in Figure 6

would be "sentence 1 → 12 seconds pause time → repeated sentence 1→ 12 seconds pause time," as shown in Figure 7.

"Number one"

| Sentence 1 |

12 second pause

| Sentence 1 |

12 second pause

"Number two"
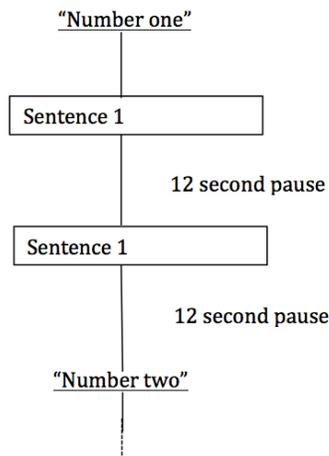
Figure 7. Structure of dynamically-constructed audio

To determine appropriate pause lengths, the writing time required for native Japanese speakers was measured. That time was multiplied by 1.5 to compensate for the gap between native speakers' and beginners' writing speeds. After instructors input the determined pause length on the *timed-dictation player,* the pauses are automatically inserted between the first and second playback. A number (in audio) is automatically inserted before each sentence to prevent confusion.

This resource allows instructors not only to create audio files with chosen pause lengths, but also to generate a URL link to a practice version of the completed dictation activity. These URLs were shared with students, and the instructors encouraged students to practice on their own before dictation activities in class. The

web resource also gives students the option to randomize the items and change pause durations by percentages (See Figure 8 and Figure 9).

Figure 8. Students' view of the web program

Figure 9. Pause duration choice

Timed-Katakana Test for Measuring Accuracy and Fluency

For both TD and WT groups, an identical Katakana test was prepared and administered at the end of the semester once students had completed Chapters 1 through 6. The test presented 46 Hiragana syllabary symbols arranged in a random order and instructed the students to convert as many of them into Katakana as possible in three minutes (See Figure 10). As mentioned earlier, although seven of

46 Katakana syllabary symbols were not practiced on the timed-dictation activities, all Katakana symbols were on the test.

JPNS101 Katakana Test	Sec._____	NAME_____

Convert Hiragana into Katakana as many as you can within 3 minutes.

- -

け→	ら→
の→	へ→
し→	む→
や→	ひ→
た→	ゆ→
な→	お→
そ→	は→
ほ→	に→
え→	め→
さ→	を→
く→	あ→
わ→	う→
と→	す→
ろ→	き→
ち→	い→
こ→	ん→
り→	る→
ま→	せ→
れ→	ね→
て→	も→
ふ→	よ→
み→	か→
つ→	
ぬ→	

Figure 10. Timed-Katakana test

Procedures

Student access to the timed-dictation files.

Students gained access to the practice script files and audio files at the beginning of each chapter and retained access until the timed-dictation test was given in class. The dictation script files for practice were uploaded to the online

Blackboard platform, which allowed students to download such materials. However,

practice was optional and instructors did not require submissions of student

practice.

Timed-dictation activity in class.

During the in-class dictation activity, instructors handed out a dictation sheet

and played the test version of the audio. After ten sentences were played, the

instructor collected the dictation sheets from students. These dictation sheets were

graded and returned to students during the next class. This procedure was repeated

five times from Chapter 2 through Chapter 6.

Timed-Katakana test.

At the end of the semester, the timed-Katakana test was administered to both

groups. For this test, the students were instructed to convert as many Hiragana

symbols as possible into Katakana in three minutes. Instructors gave students the

option to skip the Katakana they were unsure about. This test was collected and

graded by the present researcher.

Grading procedure.

The dictation activities were graded by syllabary. For example, "どうぞよろしく。

(Do-zo Yoroshiku/Nice to meet you)" has seven syllabaries, so seven points were

allocated to this sentence. Palatalized syllables such as キョ [kyo] is written with a

combination of a full syllabary キ followed by a small version of another syllabary

ョ . Such combinations were divided into each component and counted separately.

Therefore, the sentence "アジアけんきゅうのせんこうです。(Ajia kenkyu-no senko- desu/I major in Asian studies.)" has a maximum score of 15 points.

The Katakana test was graded using the following procedure. When students wrote nothing for an item or wrote an incorrect answer, it was marked as C. When the Katakana was recognizable with minor errors, it was marked as B. Perfectly written Katakana was marked as A.

Measurement

The Katakana tests were graded on accuracy and fluency. In order to measure fluency, the number of As and Bs was counted and the sum was used as each student's total score. In order to measure accuracy, only As were counted. Finally, each group's mean score was computed.

Questionnaire

After the timed-Katakana test at the end of the semester, a questionnaire was given to the TD group. The questions were as follows:

1. Overall, did you like the dictation activities?
    A) Yes, I liked it.
    B) Yes, I somewhat liked it.
    C) I neither liked it nor disliked it.
    D) I somewhat disliked it.
    E) I disliked it.

2. On average, how much time did you spend on practicing for a timed dictation test?
    _____minutes

3. Did you practice dictation using the practice audio/sheet until you are able to keep up with the test speed?

          A) Yes, I did it every time.
          B) Yes, I did it sometimes.
          C) Not that much.
          D) Not at all.

4. If you chose C or D in the previous question, provide a reason.

5. Any comments about dictation activity?

Data Analysis

In order to examine if there is a significant difference between the mean Katakana test scores of the two groups, a t-test was conducted. SAS 9.4 was utilized for this statistical analysis. The level of significance was set to 0.05.

CHAPTER 4: RESULTS AND DISCUSSION

Overview

This chapter provides analyses of the data collected from the timed-Katakana tests, dictation scores, and questionnaire results. The research question of the present study is as follows: Is a timed-dictation activity effective for JFL learners to improve their Katakana writing ability?

Results

Katakana Test.

Table 9 is a summary of the timed-Katakana test data from both groups. The maximum score on the Katakana test was 46.

Table 9: Descriptive statistics of the Katakana test

		TD group N=74	WT group N=113
Fluency	Mean	20.92	23.57
	SD	8.87	10.14
Accuracy	Mean	20.38	22.14
	SD	8.91	10.11
Accuracy/Fluency (%)	Mean	95.54	93.48
	SD	10.32	8.73

The overall timed-Katakana test scores of the WT group were higher than those of the TD group. In order to examine if the WT group significantly

outperformed the TD group, a two-tailed *t*-test was conducted. The differences were

not statistically significant for fluency or accuracy (Table 9). Also, the ratio of

accuracy to fluency was calculated; the TD group achieved a higher ratio score than

the WT group. This means that the students in the TD group achieved higher

accuracy for the Katakana they wrote. In other words, the WT test group wrote

more Katakana than the TD group, but the WT test group made more minor

mistakes than the TD group. This means that insofar as the learners in the TD group

remembered the correct Katakana, they were able to pay attention to the details and

produce more accurate writing than the WT test group. Since the data was skewed, a

Mann-Whitney *U* test was utilized in order to test the data's significance. As Table 10

shows, the differences were not statistically significant. Hence, a more detailed

analysis will be conducted later in this chapter to see if there are other reasons the

WT group achieved higher fluency and accuracy. In the next section, the effects of

the timed dictation will be examined.

Table 10: *t*-Test Results for the Katakana scores

	t/Z	*p*-value
Fluency	-1.83	0.0685
Accuracy	-1.22	0.224
Accuracy/Fluency	1.751	0.0801

The Frequency of Katakana in dictation and its impact on test result.

As mentioned in the Methodology section, it was not possible to exhaustively include all Katakana symbols in the dictation activities. Seven of 46 Katakana syllabary symbols did not appear in the dictation sentences (See Appendix). The means and standard deviations were compared to see whether the Katakana set that appeared in the dictation sentences was answered correctly more frequently on the Katakana test than the Katakana set which did not appear in the dictation sentences. The means and standard deviations for the two sets of Katakana symbols are shown below (Table 11).

Table 11 : Mean of correct answers on Katakana test

	Set that appeared	Set that didn't appear
Mean (%)	48.03	23.55
SD	19.87	16.62

A *t*-test showed that the difference between the two sets was significant (t=3.06, p<0.0037). This data indicates that learners were able to write the Katakana set that appeared in the dictation activity more accurately than the Katakana set that did not appear in the dictation activity. As explained in the Methodology section, the present study contained Katakana quizzes near the beginning of the term and several workbook assignment throughout the semester. Katakana test scores might be affected by these extra activities, as well. However, the data in Table 11 represents the effect of timed-dictation activities alone since the set that katakana appeared and set did not appear was counted in the Katakana test. The data thus shows that the timed-dictation activities did have a positive effect on learners' writing abilities.

Discussion and Further Analyses

Although the timed-dictation activity did have a positive effect, the impact was insufficient to achieve overall higher Katakana writing proficiency than the group that experienced a traditional Katakana writing activity instead of the timed-dictation. Since it is commonly believed that a learner's first language affects their second language learning, learners' first languages were examined for further analysis.

Analysis based on learners' first language.

As mentioned in the Chapter 2, Katakana was developed in part from Chinese characters. For that reason, it is possible that native Chinese speakers had an advantage in their Katakana memorization. Also, writing Chinese characters many times over and over is a common practice in China's traditional school system. Therefore, Chinese students are often accustomed to writing practice as part of learning characters. This skill set may have transferred to writing Japanese characters as well, contributing to their more fluent and accurate writing.

Table 12: Descriptive Statistics of Subjects' First Language

			TD group	WT group
Native Chinese speakers TD Group N=56 WT Group N=85	Fluency	M	19.18	22.4
		SD	7.91	9.78
	Accuracy	M	18.63	21.13
		SD	8.2	9.84
Native English speakers TD Group N=14 WT Group N=22	Fluency	M	25.5	24.68
		SD	7.64	7.91
	Accuracy	M	24.92	23.31
		SD	7.87	8.23

Since the present research included a large percentage of native Chinese speakers, the test data was examined in terms of the subjects' first languages (Table 12). Though the mean score of English native speakers in the TD group is slightly higher than that of English native speakers in the WT group, the difference between the groups was not significant, as shown in Table 13.

Table 13 : *T*-test results on WT and TD groups for native English speakers

	t	*p*-value
Fluency	0.03	0.975
Accuracy	0.84	0.40

This data shows that native English speakers in the TD group achieved about the same score as native English speakers in the WT group. As mentioned in the Methodology section, the TD group experienced a performance-based test using *Speak Everywhere*. On the other hand, the WT group used written tests as well as Katakana practice, which gave students writing opportunities. Although the TD group did not have particularly different writing opportunities than the WT group besides the timed dictation activities, the gap in the test scores between the TD and WT groups was not significant among native English speakers. This means that the timed-dictation activities raised the TD group's overall writing ability to the same extent as the WT group for native English speakers. Conversely, the mean scores of native Chinese speakers in the TD group are lower than the WT group, which means the timed-dictation had less of an impact on native Chinese speakers' test scores. This will be discussed later in this chapter.

The appropriateness of the dictation sentences.

A possible reason that the timed-dictation improved Katakana writing among the native English speakers but not among native Chinese speakers might be because the content and length of the sentences in the dictation activity were too easy for the latter group. In other words, the dictation activities may not have been challenging enough to be beneficial for some native Chinese speakers. Table 11 shows the mean and standard deviations of the scores on the timed-dictation tests on Chapters 1-5.

Table 14: Descriptive statistics on the timed-dictation tests

	Chinese native speakers		English native speakers	
	M	*SD*	*M*	*SD*
Ch2.5 Max.=63	54.8	10.66	48.58	17.66
Ch3 Max.=163	135.08	27.51	134.66	37.1
Ch4 Max.=189	178.9	12.39	173.4	23.65
Ch5 Max.=195	178.8	18.42	169.33	28.4
Ch6 Max.=237	212.86	26.86	194.1	46.75

Table 14 shows that native Chinese speakers' dictation test score means are higher than those of native English speakers for most chapters. Also, the standard deviations of native English speakers' scores are relatively high, but relatively low among native Chinese speakers. The fact that the data are negatively skewed means most of the native Chinese speakers earned higher scores on the dictation tests as seen in Figure 11 and Figure 12.
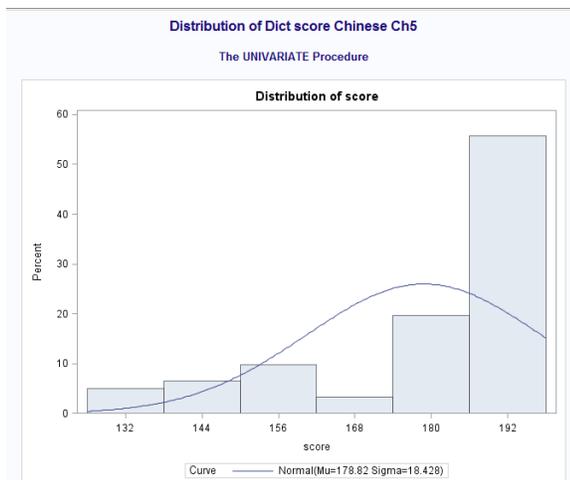
Figure 11: Distribution of Ch. 5 Dictation scores by native Chinese speakers
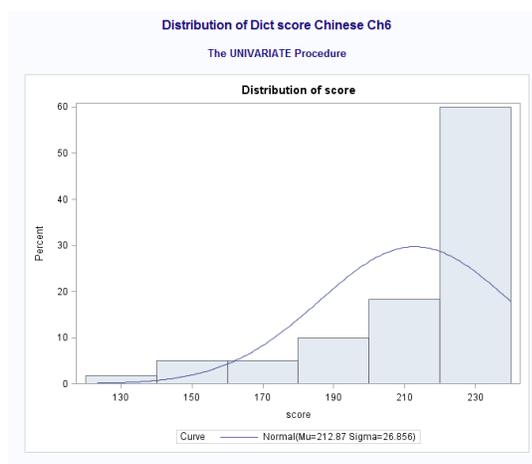
Figure 12: Distribution of Ch. 6 Dictation scores by native Chinese speakers

These data suggest that the timed-dictation activities did not require much effort from native Chinese speakers, and were not challenging enough to be beneficial for these students, and that may explain why they did not improve their Katakana writing.

Questionnaire Analysis

Learners' attitudes were recorded on the questionnaire, which was administered in the TD group after the Katakana test. Their responses to the five questions will be discussed in this section.

First, Question 1 was asked to find out about learners' preferences on the timed-dictation activity.

Question 1: Overall, did you like the dictation activity?

Table 15 : Learners' responses to Question 1

Answers	The number of learners (Total N=74)	percentages
A) Yes, I liked it.	25	33.8%
B) Yes, I somewhat liked it.	16	21.6%
C) I neither liked it nor disliked it.	16	21.6%
D) I somewhat disliked it.	9	12.2%
E) I disliked it.	8	10.8%

Forty-one students "liked" and "somewhat liked" the dictation activity. In contrast, 17 students "somewhat disliked" and "disliked" the dictation activity. More than 50% of students who took timed-dictation activities liked them.

Also, Katakana test scores were compared in terms of their preferences to see if there are any differences in test performance between those who liked the dictation and those who didn't. Table 16 shows students' Katakana mean test scores and their corresponding responses to Question 1.

Table 16 : Students' Katakana test score based on stated preferences

Responses	The Mean of the katakana test score (Max.=46)
A) Yes, I liked it.	21.68
B) Yes, I somewhat liked it.	23
C) I neither liked it nor disliked it.	22.19
D) I somewhat disliked it.	16.89
E) I disliked it.	11.38

Answer choices A) and B) were then combined into 1) Like the dictation activity; answers choices D) and E) were combined into 2) Did not like the dictation activity. Table 17 shows the means of those two groups; there is a statistically significant difference between the two (t=3.13, p<0.0028).

Table 17 : Descriptive Statistics on the Katakana tests based on stated preference 2

	Liked the dictation	Did not like the dictation
Mean	22.20	14.29
SD	9.456	6.724

In conclusion, more than 50% of students liked the timed-dictation activities, and students who enjoyed the dictation activities earned higher scores on the Katakana test than those who did not enjoy the dictation activities. This might be related to learners' motivations. When the dictation activities are challenging enough but not too difficult for learners, learners will be able to enjoy the dictation activity. In this case, learners will not become discouraged from practicing dictation activities. It follows that creating dictation materials of an appropriate level of difficulty is critical for student practice of dictation activities.

Question 2: On average, how much time did you spend on practicing for the timed

dictation test?

Figure 13 shows the descriptive statistics for the number of minutes students

studied and their Katakana scores. Pearson's correlation coefficient was computed

to examine the relationship between the two variables.

Correlation between study time and test score

The CORR Procedure

2 Variables: time test

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
time	69	61.78261	36.90404	4263	5.00000	150.00000
test	69	20.97101	8.77994	1447	3.00000	45.00000

Pearson Correlation Coefficients, N = 69
Prob > |r| under H0: Rho=0

	time	test
time	1.00000	-0.01795 0.8836
test	-0.01795 0.8836	1.00000
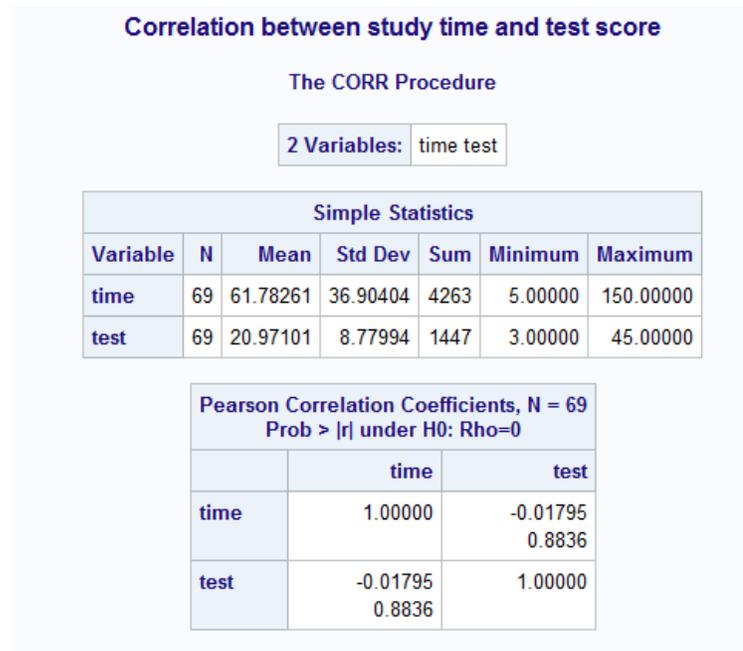
Figure 13: Correlation between study time and test score

There were five students who did not answer the question; therefore, the total

number of subjects for this question is 69. The correlation was r=-0.01795. In other

words, there was no association between these two variables. A possible reason for

this result might be that students who had confidence in their skills did not practice

the supplied audio materials for the dictation activities. They wrote sentences

instead by looking at the dictation scripts provided to them, which does not require

as much time as listening to dictation audio and writing them down. Students provided the following comments: "I mostly just wrote these sentences without hearing audio over and over" and "I didn't usually practice with audio, just sheet." Although just two students provided comments, it is conceivable that other students followed similar habits. Some of them may have done so and still received a high score on the Katakana test; others might not have been trained to write the sentences with limited time; therefore, they were unable to write Katakana script quickly and accurately on the test.

Although the present researcher did not anticipate that students would practice by reading scripts without listening to the audio, this strategy counts as practice nonetheless. As mentioned in the Literature Review section, Kuwahara et al. (2007) recommends autonomous learning and pointed out that instructors should prepare learning materials that support learners' own individual study habits. These timed-dictation activities provided by the *Timed dictation Player* are an asset as learning materials that provide individualized practice. Even if the students don't use the audio recordings, incorporating the dictation activities into a curriculum gives students opportunities to practice their writing autonomously.

Question 3: Did you practice dictation using the practice audio/sheet until you were able to keep up with the test speed?

The prepared answers were: A) Yes, I did it every time; B) Yes, I did it sometimes; C) Not that much; and D) Not at all. Table 18 shows students' Katakana scores based on their responses. Since the number of students who answered D)

was one, that response was combined with answer C). An ANOVA was conducted to examine the differences among the three groups (Table 18).

Table 18 : Katakana test score means based on the frequency of student practice

Responses	N of student	Katakana Test Score Mean (Max.=46)
A) Yes, I did it every time	39	22.18
B) Yes, I did it sometimes	24	19.67
C) Not that much and Not at all	11	15.55

Table 19: ANOVA Results for Three Question 3 Answer Types

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	443.376410	221.688205	2.95	0.0587
Error	72	5409.743590	75.135328		
Corrected Total	74	5853.120000			

R-Square	Coeff Var	Root MSE	score Mean
0.075750	42.74193	8.668064	20.28000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
group	2	443.3764103	221.6882051	2.95	0.0587

As shown in Table 19, although the result was non-significant (F=2.95, p<0.0587), the trend was detected that the more frequently students practice, the higher score they achieve on the Katakana test.

Question 4: If you chose C or D in the previous question, provide a reason.

Table 20 : Reasons students chose C or D for Question 3

English	Chinese
"Other h.w./projects I have to do" "I mostly just wrote the sentences without audio over and over." "I choose to learn the phrases before trying to write them quickly." "I used the answer sheet but not the audio I didn't think it would get that bad. It got bad."	"I think it is not very hard for me to remember that things. So I don't pay lots attention on it." "It is not too hard so I only practice writing some phrases."

Though it is unclear why some English native speakers chose to write sentences without audio, 32.2% of Chinese native speakers said that the materials were not challenging for them (as seen in Table 21) and these students studied less. From these responses, it is clear that the timed-dictation activity did not require much effort from native Chinese speakers. This trend was also shown in the next question.

Question 5: Any comments about dictation activity?

Twelve English native speakers and 31 Chinese native speakers provided written comments on the dictation activity. Those comments were categorized as helpful, difficult/tough, and easy/good. Table 21 shows the number of respondents for each category.

Table 21 : Comments on the dictation activities, categorized by opinion

	English Total N=12	Chinese Total N=31
Helpful, useful	4 (33.3%)	5 (16.1%)
	"It helped with seeing more examples of correct grammars." "Though but useful. Helped with interpreting the speech faster." "It is good way to practice listening writing."	"It is a good way to practice Japanese." "Helpful, Indeed" "good dictation. I can practice before."
Difficult/tough	8 (66.6%)	14 (45.2%)
	"I always panic when the audio comes on and forget everything." "I feel there should be more time. Not only we memorizing foreign characters but also new words. So it's so difficult to drew two new concept in the 5-10 seconds we are given." "Kind of tricky sometimes." "There is too much pressure in doing it. It goes too fast to hear it. I had to rely more on memorizing the sentences while practicing."	"Too fast." "The speed should be slower." "Too difficult, time is really limited." "It is hard but interesting." "It would be nice if there are more time in dictation so that students can check the answers."
Easy/Good	1 (8.3%)	10(32.2%)
	"Easy A"	"It's okay." "It's good." "It is appropriate length and difficult." "I love it!" "More practice sentences."

As can be seen in Table 21, 66.6% of native English speakers and 45.2% of native Chinese speakers who responded thought the timed-dictation activities were difficult, and yet 33.3% of native English speakers and 16.1% of native Chinese speakers thought the activity was helpful. This suggests that more native English speakers thought dictation activities were both challenging and helpful than did the native Chinese speakers. Conversely, more native Chinese speakers found that the dictation activities were not challenging.

There were of course, some Chinese native speakers who found the dictation activities to be difficult. Five students said the dictation is difficult/hard. Four students stated that the time is limited or speed should be decreased. One student said the activity is hard but interesting. Three students said the number and length of sentences should be decreased (Table 22).

Table 22 : Detailed responses and numbers from native Chinese speakers

Difficult/Hard	Responses and the Number of the students
	"Too difficult" "Very hard" "A bit hard" (6) "Time is limited." "Speed should be slower" (4) "Too many sentences" "Less sentences" (3) "It is hard but interesting." (1)
Easy	
	"It's okay" "It's good" (8) "It is not too hard so I only practice writing some phrases." (1) "I think it is not very hard for me to remember that things. So I don't pay lots attention on it." (1) "It is appropriate length and difficult"(1) "More practice sentences" (1)

However, more people reported that the dictation activities were not challenging. Seven students provided general comments such as "Good," "Great," or "It's okay". One student said the activity was appropriate in length and difficulty. Two students said it was not too hard and did not require much effort for them. One student said it would have been ideal if there had been more practice sentences. Given these findings, instructors might consider giving different pause duration based on the learners' proficiency or preferences individually during the class.

Summarizing the above, while the timed-dictation activity had a positive effect on JFL learners' writing, it did not have as much effect on native Chinese

speakers' writing as it did on native English speakers. A possible reason for this might be the difficulty of the dictation materials, such as the length of the sentence and pauses between them. Based on the data and survey results, the materials were too easy for most Chinese learners. First, as it can be seen in Table 14, Figure 11 and Figure 12, native Chinese speakers' test score means are higher than native English speakers for the most chapters, and the standard deviations for native Chinese speakers were also lower than native English speakers. In other words, there were a number of native Chinese speakers who received higher scores each time. This tendency was also seen in the responses on the survey. As seen in Table 21, 32.2% of native Chinese speakers said the materials were not challenging for them, and those students studied less. Thirty-two point two percent (32.2%) of these students said the dictation was easy, almost four times more than native English speakers who agreed. That is also seen in the following comments: "It is not too hard so I only practice writing phrases" or "more practice sentences." These data and responses suggest that the timed- dictation activities were not challenging enough for the native Chinese speakers.

CHAPTER 5: CONCLUSIONS

Introduction

The present study investigated the effect of timed-dictation activities utilizing a web resource on learners' Katakana writing skills. In this final chapter, research findings will be summarized, and pedagogical implications will be discussed. After presenting the limitations of this study, directions for future research will be outlined.

The Research Findings

First, the result of the timed-Katakana test showed that the WT group scored higher than the TD group, which means that the WT group performed better than the TD group on the timed-Katakana test. In order to examine if the WT group significantly outperformed the TD group, statistical analyses were conducted. The analyses showed that the differences were not statistically significant for fluency or accuracy. The ratio of accuracy to fluency was also calculated, and it demonstrated that the TD group achieved a higher ratio score than the WT group. As long as the learners in the TD group remembered the correct Katakana, they were able to pay attention to the details and produce more accurate writing than the WT test group.

Second, the frequency of Katakana in the timed-dictation activity was counted to examine if the Katakana set that appeared in the dictation sentences were answered correctly more frequently on the Katakana test than the Katakana set that didn't. The result showed that learners were able to write the Katakana set that appeared in the dictation activity more accurately than the Katakana set that did not appear in the dictation activity. Accordingly, it can be concluded that the timed-dictation activity did have a positive effect on learners' writing abilities.

Third, though the fact that timed-dictation has a positive effect, the impact was not enough for the TD group to outperform the WT group on the Katakana test, and learners' first language was examined in further analyses. The data showed that native English speakers in the TD group achieved about the same score as native English speakers in the WT group. Although the TD group did not have additional writing opportunities comparing to the WT group, the difference in the Katakana test among two groups was not significant for the native English speakers. In other words, the timed-dictation activity raised the TD group's writing ability to the same extent as the WT group for native English speakers. On the other hand, the same tendency was not observed among the native Chinese speakers.

Fourth, native Chinese speakers' dictation scores and native English speakers' dictation scores for each chapter were compared, and the results show that native Chinese speakers' dictation test score means are higher than native English speakers in almost all chapters. Also, the standard deviations among native Chinese speakers were relatively low, which showed that most of the native Chinese

speakers earned higher scores on the dictation tests. From these data, it can be inferred that the dictation activity was not challenging enough for native Chinese speakers to improve their writing skills.

Fifth, according to the analysis of the questionnaire which was administered in the TD group, more than 50% of the students overall answered they liked dictation activities. Then, Katakana test scores were compared to their preferences to see if there are any differences in the test scores between students who liked dictation activities and students who did not. The results show that students who enjoyed the dictation activities earned higher scores on the Katakana test than those who did not enjoy the dictation activities. This trend might be caused by their motivation, which means that when the dictation activities are challenging enough but not too difficult for learners, learners are more likely to enjoy the dictation activity. Opinions related to this assumption were also observed in the students' comments on the timed-dictation activities.

Sixth, of the learners that provided comments on the questionnaire (12 English speakers and 31 Chinese speakers), 66.6% of native English speakers and 45.2% of native Chinese speakers thought the timed-dictation activities were difficult. 33.3% of native English speakers and 16.1% of native Chinese speakers responded that the timed-dictation activities were useful. This means that more native English speakers found the timed-dictation activities to be difficult but helpful than native Chinese speakers did. Among the seven native Chinese speakers

who said the timed-dictation activities were not challenging enough, two students said the activities were not too hard and did not require much effort for them.

Therefore, it is clear that creating dictation materials of an appropriate difficulty level is critical for student practice.

Pedagogical Implications

The study findings indicate that the timed-dictation activities improved JFL learners' Katakana writing abilities. However, detailed analyses found that the effects vary depending on students' first languages: the materials can be too easy for some students, but too difficult for other students. In order to compensate for this mismatch, the present study suggests adjusting the dictation pause length based on learners' proficiency levels.

As seen in Figure 5, the *Timed dictation player* allows students to choose their preferred pause length between sentences, from 10%~50% shorter to 20%~100% longer. Instructors can encourage students to practice timed dictation at their preferred speed prior to the dictation tests in class. For the present study, during the in-class timed-dictation activities, all students heard the same audio with the instructor-determined length of pause, which could be too easy or too difficult for some students.

When instructors use the timed-dictation during class time in the future, it can be suggested that students bring their own computer devices or go to a computer laboratory to access the *Timed dictation player* individually. During the dictation test, instructors can recommend that learners listen to the audio individually using a

challenging but realistic speed. The pause length for the dictation tests will also be adjusted accordingly to the individual's proficiency level. Therefore, dictation activities will be challenging enough but not impossibly difficult for the learners.

As for a grading method, a system that provides more points for the students who dictate at a faster speed should be developed so that students will be encouraged to practice by themselves until they will be able to keep up with the faster speed. This will avoid discouraging learners from practicing dictation activities due to unreasonable pause lengths.

Limitations of the Study and Directions for Future Research

First, due to the curricular design of Japanese courses, some variables could not be totally controlled. For instance, the TD group took the performance-based test, and the WT group took a written test at the end of each chapter through the semester. In order to control this variable, the test style should have been matched.

Second, the Japanese classes from which the data for the present study was obtained had different instructors. In the TD group's class, the lesson plans were somewhat restricted and integrated among the instructors by a coordinator. Conversely, in the WT group's class, lesson plans were shared among instructors under a different coordinator; these instructors had more autonomy to adjust portions of the plans. Also, some instructors incorporated extra writing practice during the WT group classes, which was outside the control of this study.

Third, prior to the experiment, the equivalence of subjects' aptitudes and general academic abilities were not measured. If these elements had been considered and standardized, the results might have been different.

Fourth, the Katakana test, administered to both the TD and WT groups, asked learners to transcribe Hiragana into Katakana. There were two students might have not recognized some Hiragana; because of that, they wrote the wrong Katakana symbols. For example, one wrote ハ (ha) for ほ (Ho), and ホ (Ho) for は (Ha). This might have happened to other students who did not write anything because they were unsure about some Hiragana symbols. Hence, in future research, the Romanized representation can be put next to the Hiragana symbols as an aid, such as ほ(Ho), は(Ha) and so on.

Finally, as explained in the previous section, the difficulty level of the timed-dictation material was not appropriate for some learners. The alternative method, adjusting the difficulty of materials during the dictation tests by allowing learners to choose their own challenging audio speeds, is recommended. In order to see if this version of timed-dictation activities has an effect on improving student writing, further research is necessary.

REFERENCES

REFERENCES

Ann Yonha. (2011). Nihongo gakushusya ni taisuru Katakanago kyo-ikuno mondai to teian. (The problems and suggestions for Katakana teaching of the Japanese language.) *Tamamo*, *46*, A55-A66.

Banno Eri, Ohno Yutaka. (2003). Web jo- de kado- suru Nihongo kyo-zai no kaihatsu. (The development of Japanese teaching material online). Okayama University. *Center for Global Partnerships and Education Bulletin*, *10*, 35-44.

Cziko, G. A. (1982). Improving the psychometric, criterion-referenced, and practice qualities of integrative language tests*. *Tesol Quarterly*, *16*(3), 367-379.

Hamada Miwa, Goto Hiroki, Fukazawa Nozomi. (2004). Nihongo gakushu-shien saito no yakuwari to ko-ka: Daigaku ni okeru so-go-teki nihongogakushu-shientaise- no ko-chiku to saito no kaisetsu. (The role and effect of a website for supporting JFL learners: The establishment of a support system in university setting). Toyama Univesrity. *Journal of International Student Center*, 3:1-14

Hatasa, K. (1991). Teaching Japanese syllabary with visual and verbal mnemonics. *CALICO Journal*, *8*(3), 69-80.

Hatasa, Y. A., Hatasa, K., & Makino, S. (2014). *Nakama 1*. *Cengage Learning*.

Igarashi, Y. (2007). *The changing role of katakana in the Japanese writing system: Processing and pedagogical dimensions for native speakers and foreign learners* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses A&I. (NR41190)

Irvine, P., Atai, P., & Oller, J. W. (1974). Cloze, dictation, and the test of English as a foreign language. *Language Learning*, *24*(2), 245-252.

Jafarpur, A., & M. Yamini, (1993). Does practice with dictation improve language skills? *System, 21*, p. 359-369.

Jinnouchi Masataka. (2008). Nihongo gakushuusya no Katakanago ishiki to Katakanago kyouiku (JFL learners' attitude towards Katakana words and Katakana teaching). *Gengo to Bunka* (*Language and Culture*), *11*, 47-60.

Kaga, M. (1991). Dictation–as a measure of Japanese proficiency. *Language testing*, *8*(2), 112-124.

Kuwabara Yoko, Shikita Noriko, Zhao Xiaoni. (2007). Developing Japanese CALL materials or Katakana word practice and sound recognition drill CALL, *University of Fukui International Center Bulletin*, *2*, 1-10

Morris, S. (1983). Dictation-a technique in need of reappraisal. *ELT Journal*, *37*(2), 121-126.

Nakagome Akiko. (1995). The use of dictation targeting intermediate and advanced Japanese learners. *Ochanonmizu University Japanese Language and Cultures research group,* 9, 269-280.

Nakayama Eriko, Jinnouchi Masataka, Kiryu Rika. (2008). Nihongo kyo-iku ni okeru "Katakana kyo-iku" no atsukawarekata (Teaching Japanese as a foreign language: Katakana and its implementation in the syllabus). *Japanese Teaching Education,*138, 83-91.

Nation, P. (1991). Dictation, dicto-comp and related techniques. *English Teaching Forum*, *29(October)*, p. 12-14.

Ogawara Yoshiro, Takahashi Akiko.(2013). Dictation ni yoru onse- chikaku training no jissen to kadai (Dictation in listening perception training: Practice and problems). *Japanese Language Education Methods*, *20*(2), 60-61.

Oller, J. W. (1971). Dictation as a device for testing foreign-language proficiency 1. *ELT Journal*, *25*(3), 254-259.

Oller, J. W., & Streiff, V. (1975). Dictation: A test of grammar-based expectancies. *ELT Journal*, *30*(1), 25-36.

Otsubo Kazuo.(1992). Nihongo kyo-iku deno computer riyo- no kako, genzai to mirai. (The use of computer in Japanese teaching settings in the present, past and future). [Special edition]. *Japanese Teaching Education and CAI,* 78, 9-19.

Pappas, G. S. (1977). You mean you still give dictation? *Language Arts*, *54*(8), 936-939.

Sawyer, J. & Silver, S. (1961). Dictation in language learning 1. *Language Learning*, *11*(1-2), 33-42.

Stansfield, C. W. (1985). A history of dictation in foreign language teaching and testing. *The Modern Language Journal*, *69*(2), 121-128.

Taguchi kanae, Nakamura Fusako, Nichiyama Tomoe. (2013). Practice of peer-

dictation targeting intemediate learners−Effects and problems based on

interviews. *Japanese Language Education Methods*, *20*(1), 60-61.

Torikai Kumiko. (2007). Katakanago ni miru imi no zure. (The semantic gap

observed in Katakana words). *Language*, *36*(6), 52-59.

Whitaker, S. F. (1976). What is the status of dictation? *Audio-Visual Language*

Journal, 14, 87-93.

APPENDICES

Appendix A: An example of graduated dictation script from Kaga (1991)

1 アメリカの
2 たいていの
3 高校生と　ちがって
4 日本の　高校生は
5 しゅくだいや　テストで　たいへんだ。
6 あまり　たくさん　ない
7 ゆうめいな　大学に　入りたいと　思ったら
8 毎日　学校の　勉強　以外にも
9 とくべつ　何時間も　勉強しなければ　ならない
10 そう　しなければ、　ほかの　たくさんの　受験生との
11 きびしい　競争に　勝つことは　とても　できない。
12 しかし、　ゆうめい校に　入ってしまうと　後は　らくで、
13 卒業　した　後は、　たいてい　大きい　会社で　仕事が　できる。
14 しかし、心配は　子どもの時に、　ほんとうに　子どもらしい　遊びや　楽しみを
15 ぜんぜん　知らないで　成長　した　人間が　精神的にも　成長　して　いるか　どうかで、
16 最近の　若い　者は　常識が　ないとか　礼ぎが　できて　いないと　よく　言われる。
17 どんなに　大きい　会社に　しゅう職　する　ことが　できても　人間的に　じゅう分　成長　する　ことが　できないなら、
18 有名な　大学に　入る　ための　時間を　せいしんてきに　ゆたかな　人間に　なる　ために　使って　ほしい　ものだ。

Appendix B: The number of Katakana syllabaries appeared in the dictation materials
and Katakana practice materials

Dictation Chapter	Ch2.5	3	4	5	6	Total	The number of Katakana in the Katakana activities 1 ~ 5
ア	2	0	1	2	1	6	1
イ	1	3	3	1	1	7	4
ウ	0	0	0	0	0	0	1
エ	0	1	1	0	0	2	1
オ	0	0	0	0	0	0	1
カ	2	1	1	0	0	4	1
キ	0	1	1	1	2	5	1
ク	0	1	0	0	3	4	2
ケ	1	0	0	0	1	2	0
コ	1	1	1	2	3	8	1
サ	0	0	0	0	1	1	2
シ	3	2	1	1	3	10	2
ス	0	5	2	1	3	11	6
セ	0	0	1	0	0	1	1
ソ	0	0	0	1	0	1	1
タ	1	0	1	1	1	4	3
チ	0	0	1	0	0	1	0
ツ	0	0	0	1	0	1	0
テ	0	1	0	1	3	5	1
ト	2	1	3	4	3	13	7
ナ	1	0	0	0	0	1	1
ニ	0	0	0	0	2	2	0
ヌ	0	0	0	0	0	0	0
ネ	0	1	0	1	0	2	0
ノ	0	0	0	1	0	1	0
ハ	0	0	2	1	3	6	3
ヒ	0	3	0	1	3	7	1
フ	0	1	2	2	1	6	2
ヘ	0	1	1	2	1	5	0
ホ	0	0	1	2	0	3	2
マ	0	0	0	0	0	0	0
ミ	0	0	0	0	0	0	0
ム	0	0	0	0	2	2	1
メ	0	0	1	1	1	3	1
モ	0	0	0	1	0	1	0
ヤ	0	1	0	0	0	1	2
ユ	0	0	0	1	1	2	1
ヨ	0	0	0	0	2	2	0
ラ	0	2	1	1	0	4	4
リ	0	2	0	0	0	2	2
ル	0	0	0	2	3	5	1
レ	0	2	0	1	0	3	3
ロ	0	0	0	0	0	0	1
ワ	0	1	1	0	0	2	0
ヲ	0	0	0	0	0	0	0
ン	0	2	3	0	5	10	9

Appendix C: The number of Katakana syllables for the practice version of the timed-dictation activities and study guides

Katakana set appeared in the dictation	Percentage of the correct answers	Katakana set did not appear in the dictation	Percentage of the correct answers
ア	85.14	ウ	39.19
イ	77.03	オ	50.00
エ	47.30	ヌ	9.46
カ	81.08	マ	24.32
キ	81.08	ミ	20.27
ク	50.00	ロ	20.27
ケ	43.24	ヲ	1.35
コ	55.41		
サ	45.95		
シ	77.03		
ス	52.70		
セ	37.84		
ソ	40.54		
タ	47.30		
チ	28.38		
ツ	51.35		
テ	39.19		
ト	66.22		
ナ	37.84		
ニ	72.97		
ネ	13.51		
ノ	56.76		
ハ	27.03		
ヒ	37.84		
フ	43.24		
ヘ	64.86		
ホ	20.27		
ム	43.24		
メ	28.38		
モ	25.68		
ヤ	59.46		
ユ	45.95		
ヨ	39.19		
ラ	29.73		
リ	67.57		
ル	28.38		
レ	16.22		
ワ	24.32		
ン	83.78		