Pronunciation and Interpretive-Listening Practice Using Shadowing in Lower Level Courses

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Abstract

SLA teachers' chief concern is to find the best method of increasing students' knowledge in a limited class time. In as little as five minutes a day, using "Shadowing" is the fastest, easiest, the most efficient way for increasing speaking competency. Shadowing practice was originally designed for simultaneous interpreter training, but in terms of improvement in SLA learners' listening and pronunciation, previous researches have proved its effectiveness. Some studies even show its benefit for reading comprehension as well. Among the advantages of shadowing are: no advanced preparation is needed, it does not take significant class time (five minutes is sufficient), and it is easy to demonstrate and learn. By focusing on bottom-up processing through mimicking native speakers as they listen, students can improve their speed of phonetic representation process, ultimately leading to automatization of speech perception.

The subjects of this research are undergraduate students, who are taking second and fourth semester Japanese courses. Students practiced lesson dialogues for the first five minutes of the class after preparing at home using textbook audio CD. The experimental groups used shadowing, and control group used repetition. We compared the results of the two groups analyzing the effectiveness for different level of students. Though most students enjoyed dialogue practice overall, and decided to incorporate shadowing exercise into their language study, they struggled with the length of the sentence/dialogues. We would consider students' posttest reflection for future practices to help students to get the best result.

Keywords: shadowing, repeating, pronunciation, prosody, bottom-up

Introduction

For most of the American students, Japanese has a simpler and transparent sound system in comparison to Western language, like English. There are only five vowels and little over ten consonants to form basic sounds. With few exceptions, as opposed to English, there is no sound change. As a result, students usually master each sound fairy quickly, and yet, many have trouble speaking with natural accent and/or intonation. The difference between syllable-timed language and mora-timed language would be one of the reasons. Repetition tends to be a good practice for learning speaking. This usually works when the learners have already had significant experience with Japanese, or they have musically inclined ears because repetition is off-line practice. Due to the time lag between the original speeches, learners tend to produce based on their known memory. On the other hand, 'Shadowing' is on-line practice, which forces learners to imitate the original sound instead of allowing them to check with their memory. Our hypothesis is that introducing 'Shadowing' from the early stage of language learning is beneficial for improving listening comprehension, natural pronunciation and intonation. This study also examined if 'Shadowing' can serve as a total warm-up for everyday class, which helps students to get out more from the class.

Literature Review

In the beginning of language learning, learners tend to use their cognitive resources and working memory capacity on decoding. Because decoding takes most of their energy, it takes time, so fewer cognitive resources are left for comprehension. 'Shadowing' helps learners to practice decoding faster, ultimately automatically, so that they can spend more of their resources on comprehension in listening. In speaking, 'Shadowing' trains learners'

mouth movement in order to produce sound more smoothly. Anderson-Hsieh and Koehler's (1988) study suggests that "speaking rate is an important factor in the comprehension of the nonnative speech" (591). In the same study, the importance of prosody was another key finding that could explain why some students cannot speak naturally, even they mastered each sound. Anderson-Hsieh, Johnson, and Koehler (1992) also state the importance of prosody in pronunciation. 'Shadowing' itself does not have a direct benefit at the planning stage of speaking, but students could become familiar with basic sentences and phrases from the practice. This knowledge should provide the template during the planning stage of speaking. Practicing as a sentence or a paragraph instead of individual word, students can internalize sound, meaning, and usage all together in one practice method. Most importantly, bottom-up skills become very crucial in order to advance further in language learning.

"Shadowing" is a well-known practice among the simultaneous interpreters. The basic principle is "to shadow/mimic" the model speech as he/she hears. Because there is no break between the model speech and reproduction speech from the listeners, this practice helps to develop their cognitive resources and working memory capacity to name a few. It has been also proven that 'Shadowing' helps language learning, especially in terms of listening comprehension and pronunciation. Through 'Shadowing,' learners can improve their motor skill, acquire model sentences/structures, and train to automatize their bottom-up skills. Because language is such quintessential part of human life, human came up with the rules that require less effort/energy. Following the natural speed, they train their mouth movement and learn reasoning behind some structures without realizing it. In order to make 'Shadowing' the most effective, Kadota (2007, p236) suggests employing i-1 level sentences. Because meaning and structure of the model sentences are already familiar to the learners, 'Shadowing' becomes simply practice for the natural sound. People perceive sound, process, and then produce. For beginners the first steps of processing, bottom-up skill or decoding usually takes

time because their phonological representation and phonetic representation have to go through manual steps. Operating this step automatically is the key skill to become a better language learner/user.

As students advance to a higher level language class, amount of information that they can process would be a key factor. At the beginning stage, language learning is still going on, specifically how a particular language works and how to *use* it correctly. However, the ultimate goal should be a language *speaker* not a language *user*. Language is not the main goal learning, but rather a medium of learning. If learners struggle at decoding stage, focusing on the contents would be challenging. Top-down skills allow learners to gather information without decoding everything, but good bottom-up skill is necessary for the best result. The ideal condition is when bottom-up and top-down skills are working together.

Later studies (Chung, 2010. Doi, 2011. Mochizuki, 2006. Ogihara, 2007. Shiki, 2006 and 2010.) have proved many benefits of 'Shadowing.' While they provided valuable results, the research was conducted during a short period of time, using a CALL class, or not in a typical language classroom in the States. Moreover, there were not many studies with subjects in a lower-level language class. Hence, we chose our approach. First, present study investigated the effect of 'Shadowing' to the first and second year students. If a school has resources for a CALL class, it would be a great opportunity for students to practice individually and instructors to check. However, 'Shadowing' does not require any extra materials and longtime even in a regular class. The second goal was classroom implementation. Shiki, Mori, Kadota, and Yoshida (2010) show that there was a ceiling effect after five times of practice. They suggested practicing 'Shadowing' for just a few times, or the first five minutes or so in the language class as an alternative of a CALL class. Based on their suggestion, this study tries to see the best way of incorporating 'Shadowing' into non-CALL class without sacrificing valuable class time.

Procedure

This study was conducted in the Spring of 2013 among the students of the 1st and 2nd year of the Japanese Program at the University of Wisconsin-Milwaukee. Students took a pretest in the beginning of the semester and a posttest at the end. Both tests included two tasks: listening and reading. The listening test consisted of multiple choice questions based on the Japanese Language Proficiency Test, 3rd through 5th levels. The questions were modified to suit the participants' level of competence in terms of grammar and vocabulary. For the reading test, students were asked to read an excerpt from a Japanese short story book. The stories were different depending on the students' level. Both the 1st and the 2nd year Japanese had three sections. Student numbers in the three sections were different. In order to balance the numbers of participants for the two practices, the two smaller sections (10 and 14 students) did shadowing practice while the remaining larger section (15 students) did repetition practice. It was the same in the 2nd year Japanese program: section one (13 students) and section three (7 students) performed the shadowing practice while section two (14 students) did the repeat practice.

The textbooks used in the Japanese program were "*An integrated course in Elementary Japanese: Genki I & II*". Both shadowing and repetition practices were based on the written model conversations in these books. For the repetition practice, the researcher played the CD of each conversation sentence by sentence with a pause in between when students repeated the sentences just heard. In contrast, in the shadowing practice, students were required to mimic the sentence while still listening. The repeat practice took a little more time because students had to wait until the sentence ended. Still, both practices took approximately 5 to 7 minutes. Each lesson in the textbooks had two conversations. Students studied each lesson for 2 weeks spending one week on each conversation. In addition to the practice in class, students were required to record their own practice and send it to the

instructors as homework. It was only after the semester ended that the results were collected, compared, and analyzed using Statistical Package for the Social Science (SPSS).

Since the listening test involved multiple choice questions, it was rather easy to compare the students' scores. However, the evaluation of the reading tests was more complicated, as it involved 4 different criteria. To test students' vocabulary, we graded them on separately on content words (e.g. nouns) and function words (e.g. particles). To test their sentence structure, they were graded on prosody and how long it took for them to pronounce the sentence. In order to evaluate the length of time it took to produce the sentence, we asked two native Japanese students to read the same sentences and we timed them. We then compared the time of the native Japanese readers and the time of the students. We were intent to see how the students improved on all 4 of these criteria.

Results

Since some students did not take both the pretest and the posttest, the number of actual subject was small than the entire classes. Thus, Table 1 shows the numbers of students for each task.

Table 1. Numbers of students who took both the pretest and the posttest

Test	Group	First year students	Second year students
Listening	Shadowing	24	19
	Repeating	15	12
Reading	Shadowing	14	12
	Repeating	11	7

First of all, it was necessary to compare the average of student scores between the shadowing and the repetition groups to find out whether the two groups showed any significant differences on the baseline level. Table 2 and Table 3 show the scores of each group according to year.

Table 2. Pretest between shadow and repeat groups of 1st year students

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Listening Pre	2.264	.146	-1.076	23	.293	-.779	.724	-2.277	.718
			-1.122	22.793	.273	-.779	.694	-2.216	.658
RePreC	.269	.609	.648	23	.524	3.727	5.754	-8.175	15.630
			.646	21.352	.525	3.727	5.772	-8.264	15.719
RePreF	.009	.925	.209	23	.836	1.292	6.179	-11.490	14.075
			.211	22.391	.834	1.292	6.112	-11.370	13.955
RePreS	.029	.867	-.140	23	.890	-.877	6.258	-13.823	12.070
			-.142	22.690	.888	-.877	6.154	-13.617	11.864
RePreT	2.519	.126	.257	23	.800	8.292	32.301	-58.527	75.111
			.270	22.368	.790	8.292	30.714	-55.344	71.928

Table 3. Pretest between shadow and repeat groups of 2nd year students

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Listening Pre	.688	.423	1.599	12	.136	2.533	1.584	-.918	5.985
			1.454	6.443	.193	2.533	1.742	-1.659	6.726
RePreC	16.134	.002	1.220	12	.246	4.822	3.953	-3.791	13.435
			.957	4.631	.386	4.822	5.039	-8.447	18.091
RePreF	.186	.674	-.475	12	.643	-.911	1.917	-5.087	3.265
			-.432	6.423	.680	-.911	2.110	-5.993	4.171
RePreS	3.138	.102	1.101	12	.293	9.244	8.399	-9.056	27.545
			.936	5.472	.389	9.244	9.877	-15.499	33.988
RePreT	15.321	.002	-1.559	12	.145	-47.156	30.247	-113.059	18.748
			-1.181	4.343	.298	-47.156	39.941	-154.677	60.366

Table 4. Pretest and Posttest of 1st year students

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
ListeningPre - ListeningPost	-2.720	2.492	.498	-3.749	-1.691	-5.457	24	.000
RePreC - RePosC	-24.160	15.038	3.008	-30.367	-17.953	-8.033	24	.000
RePreF - RePosF	-15.240	13.788	2.758	-20.931	-9.549	-5.527	24	.000
RePreS - RePosS	-35.080	12.536	2.507	-40.255	-29.905	-13.991	24	.000
RePreT - RePosT	112.000	63.968	12.794	85.595	138.405	8.754	24	.000

Table 5. Pretest and Posttest of 2nd year students

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
ListeningPre - ListeningPost	-3.357	2.620	.700	-4.870	-1.845	-4.795	13	.000
RePreC - RePosC	-5.857	5.723	1.529	-9.161	-2.553	-3.830	13	.002
RePreF - RePosF	-2.071	3.668	.980	-4.189	.047	-2.113	13	.055
RePreS - RePosS	-7.429	9.669	2.584	-13.011	-1.846	-2.875	13	.013
RePreT - RePosT	40.571	34.603	9.248	20.592	60.550	4.387	13	.001

Table 6. Posttest between shadow and repeat groups of 1st year students

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Listening Post	Equal variances assumed	.046	.831	-.526	37	.602	-.508	.967	-2.468	1.451
	Equal variances not assumed			-.540	32.416	.593	-.508	.942	-2.425	1.409
RePosC	Equal variances assumed	.305	.586	-1.029	23	.314	-5.286	5.138	-15.915	5.344
	Equal variances not assumed			-1.043	22.543	.308	-5.286	5.069	-15.782	5.211
RePosF	Equal variances assumed	.062	.806	-1.007	23	.324	-3.487	3.462	-10.650	3.676
	Equal variances not assumed			-1.011	21.906	.323	-3.487	3.450	-10.643	3.669
RePosS	Equal variances assumed	.321	.577	-.817	23	.422	-1.000	1.223	-3.530	1.530
	Equal variances not assumed			-.842	22.999	.408	-1.000	1.187	-3.456	1.456
RePosT	Equal variances assumed	2.103	.161	-.476	23	.638	-8.104	17.010	-43.292	27.084
	Equal variances not assumed			-.457	17.410	.653	-8.104	17.726	-45.435	29.227

Table 7. Posttest between shadow and repeat groups of 2nd year students

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Listening Post	Equal variances assumed	.137	.714	-1.124	29	.270	-1.167	1.038	-3.289	.956
	Equal variances not assumed			-1.118	23.121	.275	-1.167	1.043	-3.324	.991
RePosC	Equal variances assumed	.337	.571	.087	14	.932	.164	1.876	-3.860	4.187
	Equal variances not assumed			.082	6.880	.937	.164	1.986	-4.550	4.877
RePosF	Equal variances assumed	.088	.771	-.712	14	.488	-.800	1.124	-3.211	1.611
	Equal variances not assumed			-.802	10.572	.440	-.800	.997	-3.006	1.406
RePosS	Equal variances assumed	5.328	.037	.249	14	.807	.309	1.241	-2.352	2.971
	Equal variances not assumed			.192	4.851	.856	.309	1.614	-3.878	4.496
RePosT	Equal variances assumed	14.763	.002	-.049	14	.962	-.873	17.894	-39.252	37.506
	Equal variances not assumed			-.037	4.703	.972	-.873	23.835	-63.325	61.579

Table 8. ANOVA Posttest of both 1st and 2nd year students

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
ListeningPost	Between Groups	11.671	3	3.890	.652	.587
	Within Groups	208.688	35	5.963		
	Total	220.359	38			
RePosC	Between Groups	6687.712	3	2229.237	17.703	.000
	Within Groups	4407.365	35	125.925		
	Total	11095.077	38			
RePosF	Between Groups	9229.176	3	3076.392	19.985	.000
	Within Groups	5387.798	35	153.937		
	Total	14616.974	38			
RePosS	Between Groups	1211.920	3	403.973	2.419	.083
	Within Groups	5845.516	35	167.015		
	Total	7057.436	38			
RePosT	Between Groups	25471.520	3	8490.507	5.620	.003
	Within Groups	52879.916	35	1510.855		
	Total	78351.436	38			

Table 9 . Post Hoc of ANOVA Posttest of both 1st and 2nd year students

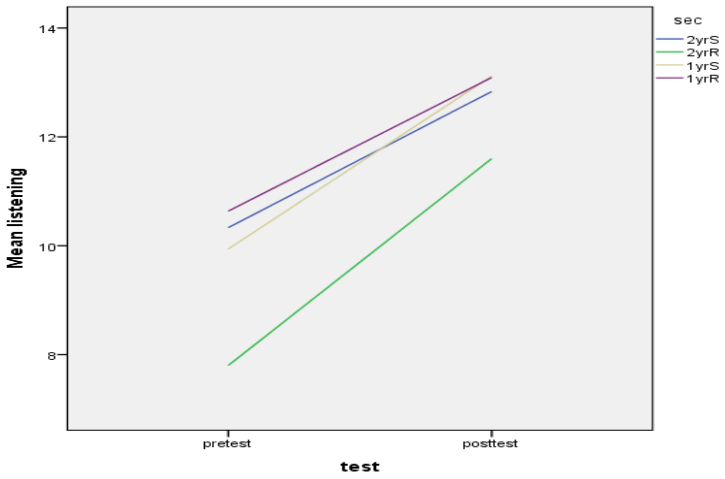
Multiple Comparisons

LSD

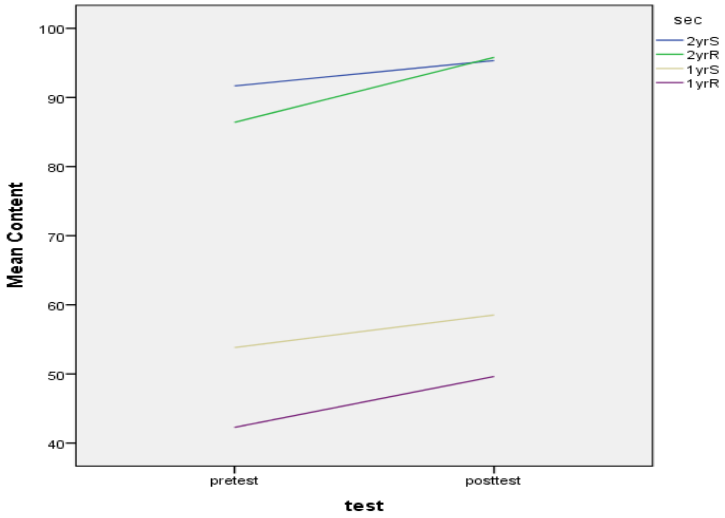
Dependent Variable	(I) sec	(J) sec	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Listening Post	1yr shadow	2yr shadow	-.659	1.043	.532	-2.78	1.46
		2yr repeat	1.186	1.272	.358	-1.40	3.77
		1yr repeat	-.305	.984	.758	-2.30	1.69
	1yr repeat	2yr shadow	-.354	1.098	.749	-2.58	1.87
		2yr repeat	1.491	1.317	.265	-1.18	4.16
		1yr shadow	.305	.984	.758	-1.69	2.30
ReadingC Post	1yr shadow	2yr shadow	-30.071	4.794	.000	-39.80	-20.34
		2yr repeat	-28.271*	5.846	.000	-40.14	-16.40
		1yr repeat	-5.890	4.521	.201	-15.07	3.29
	1yr repeat	2yr shadow	-24.182*	5.044	.000	-34.42	-13.94
		2yr repeat	-22.382*	6.052	.001	-34.67	-10.09
		1yr shadow	5.890	4.521	.201	-3.29	15.07
Reading F Post	1yr shadow	2yr shadow	-33.889	5.301	.000	-44.65	-23.13
		2yr repeat	-35.000*	6.464	.000	-48.12	-21.88
		1yr repeat	-5.909	4.999	.245	-16.06	4.24
	1yr repeat	2yr shadow	-27.980*	5.577	.000	-39.30	-16.66
		2yr repeat	-29.091*	6.692	.000	-42.68	-15.51
		1yr shadow	5.909	4.999	.245	-4.24	16.06
Reading S Post	1yr shadow	2yr shadow	-13.841	5.521	.017	-25.05	-2.63
		2yr repeat	-11.086	6.733	.109	-24.75	2.58
		1yr repeat	-4.468	5.207	.397	-15.04	6.10
	1yr repeat	2yr shadow	-9.374	5.809	.116	-21.17	2.42
		2yr repeat	-6.618	6.970	.349	-20.77	7.53
		1yr shadow	4.468	5.207	.397	-6.10	15.04
Reading T Post	1yr shadow	2yr shadow	52.270	16.607	.003	18.56	85.98
		2yr repeat	43.114	20.251	.040	2.00	84.23
		1yr repeat	-8.104	15.661	.608	-39.90	23.69
	1yr repeat	2yr shadow	60.374*	17.471	.001	24.91	95.84
		2yr repeat	51.218*	20.965	.020	8.66	93.78
		1yr shadow	8.104	15.661	.608	-23.69	39.90

There were no significant differences: students' initial average ability in each group was almost the same. For the next step, Table 4 and Table 5 compared the scores of the pretest and the posttest of the1st year and the 2nd year students. There were indeed significant changes between the two tests. These results meant that there were great improvements in the students' Japanese ability by the end of the semester. Table 6 and Table 7 are comparisons of the posttest results of the shadowing and repetition groups both in 1st and 2nd year. Both groups showed the same degree of improvement.

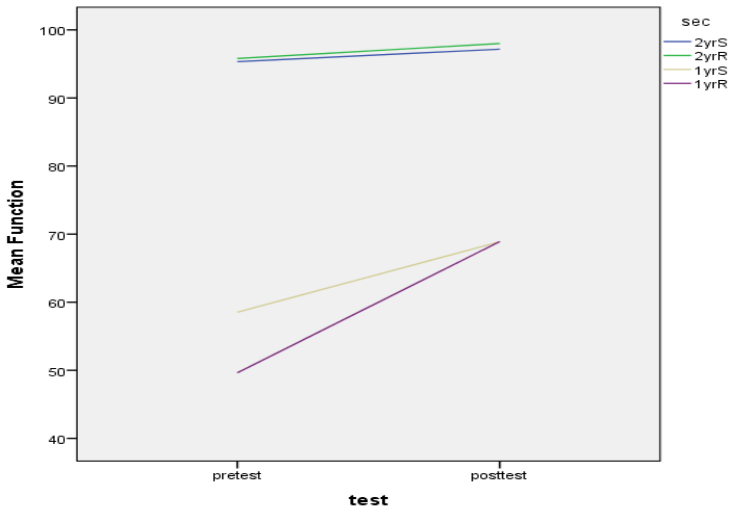
Although there was no statistical significance shown by the results, an ANOVA test was conducted to find out which was the most improved group from among the 4 groups.



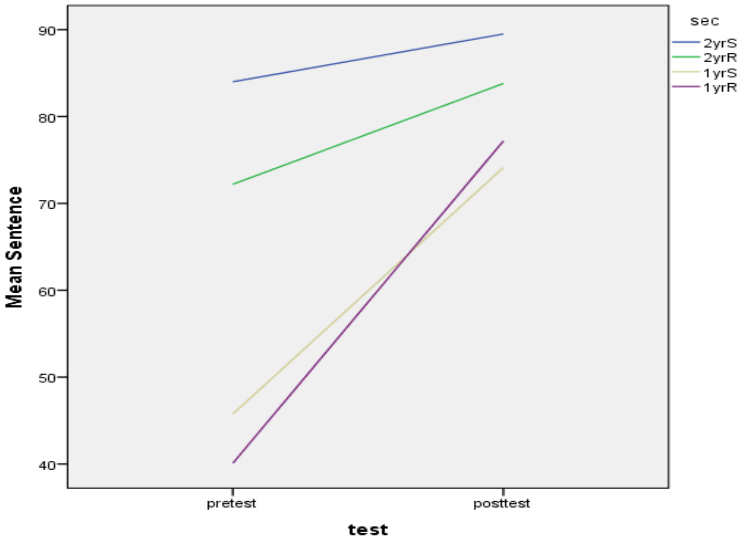
Graph 1. Listening pre/posttest of each group (20 points total)



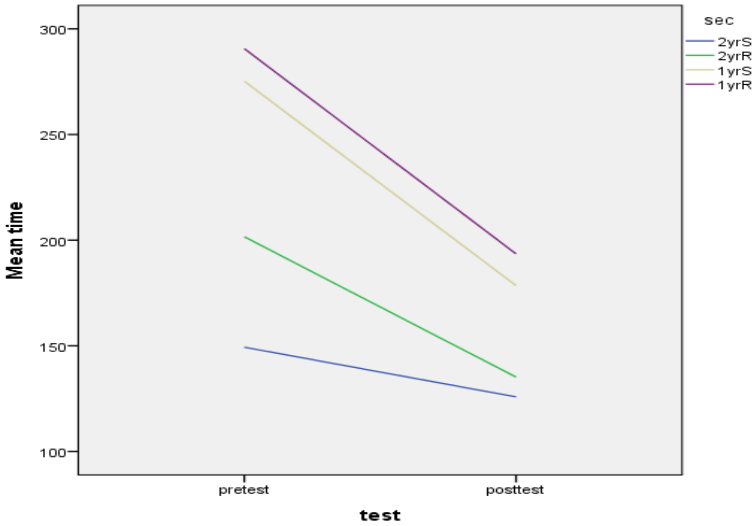
Graph 2. Reading content pre/posttest of each group (%)



Graph 3. Reading function pre/posttest of each group (%)



Graph 4. Reading smoothness pre/posttest of each group (%)



Graph 5. Reading timing pre/posttest of each group

As a result, as Table 8 showed, there were some changes in reading especially in the content word, function word, and time categories. Table 9 presents post-hoc data showing which group shows a difference in which category. According to the table, the difference between the 1st year and 2nd year students was significant. For better comparison, graphs were provided above. Graph 1 shows the results of both the listening pretest and posttest for each group. Graph 2 through Graph 5 show the scores of each criterion in the reading test. In the listening tests, the 1st year repeating group scored the highest in both the pretest and the posttest while the 2nd year repeating group showed the lowest. However, the 2nd year

repeating group showed the greatest improvement. Even though the ANOVA test showed no significance in the listening test, the graph showed great improvement in the 2nd year repeating group. In the reading test, the 2nd year groups achieved higher scores overall than the 1st year groups. Especially in the content words and function words results, there were huge differences between the 1st year and the 2nd year groups. In the smoothness test, although there were differences among the 1st year and the 2nd year groups, the 1st year repeating group showed the highest improvement.

In summary, the research result showed that there were no significant difference between the shadow and the repeat practices. Students' listening and reading ability did improve greatly regardless of year and task. Even though there were some changes within groups according to the types of practices, they were not statistically significant.

Discussion

The purpose of this research is to find out whether the shadowing practice is of benefit for students' perception and pronunciation ability. The results showed that both the repeating and the shadowing practice helped to improve students' reading competency. In fact, there was no significant change shown between the shadowing and the repeating groups. This result seemed to be caused by students' unawareness of the very nature of the two practices. At the beginning of the study, students were told what the purpose of the research was, what practices would be performed, and what they should do for each activity. However, they did not seem to understand the difference between repetition and shadowing. For example, in the repetition group, students sometimes shadowed the sentences while some students in the shadowing group waited until the sentence was finished. Therefore, strictly speaking, the two types of practices were not separate: each task was performed almost like the other.

The statistics results showed no difference among groups or year; however, the graphs showed some interesting facts. First, there was a great gap between the 1st and 2nd year students. In terms of timing, the 1st year students' timing was much shorter. The average score of the posttest of the 1st year students was reduced to 2/3 of the time of the pretest. Second, the smoothness test scores also showed great improvement in the 1st year students. The improved scores prove that students got better at perceiving Japanese phonetics and became familiar with it by mimicking. This is one of the benefits of the shadowing practice. The reading results in this research also suggest that the practice was more beneficial for beginning level students.

In conclusion, even though there was no difference shown between the two types of practices, the 1st year students' ability in pronouncing the sentences in the right way greatly improved. In this research, even though the practices were divided into two different types, what the students performed was a mixture of the two practices and therefore both groups improved equally. This supports other scholars' claim that shadowing is not of direct benefit for speaking although students do become familiar with basic sentences structure. Given that the 1st year students' scores were much improved in this research, it is clear that the practice was more beneficial on the beginning level.

Implications and further study

There are some limitations in present research, thus we proposes a suggestion for further improvement and future study based on these limitations. First, the number of data in the study was rather small. Even though we conducted the study with all of the 1st and the 2nd year Japanese students, not many students took both the pretest and the posttest, and we were forced to exclude the students who did not take either test. Second, it was very difficult to perform "real" shadowing practice in the classrooms. Since the classroom was not equipped

with lab environment, the practice was performed by students listening to a live speaker. It was quite difficult for students to listen to the sound individually. Students could hear other students' practicing; at times, this caused students to become overwhelmed by their classmates' simultaneous speaking. The situation made them easily pause and stop so frequently that the practice could not be performed as planned. As a result, bothered by the other classmates' voices, students failed to focus on listening to their own voices. This reduced their chances for self-correction of their pronunciations. Third, practices were rather hard and boring. During the practice, some students seemed to be bored to repeat or shadow sentences: some did not follow the sentences at all. We assumed the reasons for their negligence to be: 1) they were not fully aware of the advantage of the practices, 2) some sentences were a little too long for students to follow, and 3) the classmates' voice bothered to speak loud. In fact, some students complained about the fast pace of the conversation. For the shadowing practice, in the follow-up survey, they indicated that the fast-paced sentences were hard to mimic. Fourth, while all the test scores were improved in all the groups, it was not clear whether the result was solely caused by the practice itself since the regular curricula of Japanese program also included some reading practice and speaking tests as well. Especially in the 2nd year Japanese program, students were required to read each chapter's reading materials. We surmise that this may affect their practice in some degree. Last, the research was conducted to compare two types of practices without a control group. Therefore, there was no baseline data to compare of the two treatment groups. In spite of all the limitations, it is still clear that the practices are beneficial for the students. Being only 5 to 7 minutes long, compared to the time consumed with other practices, shadowing practice is very effective to improve students' speaking. This is especially so in situations where students have fewer chances to hear and talk with native Japanese students.

The important thing for further study is how to design and implement shadowing practice into a curriculum. After the short follow up survey, on the whole, most of the students answered that both shadowing and repetition practice were beneficial for Japanese learning. Only two students answered that the practice was waste of time. However, only two students answered that they would continue to apply the dialogue practice for their learning after the conclusion of this research. Based on their answers, we may assume that students might not be aware of the visible progress engendered by the practice. At the same time, they appear to feel comfortable and confident of pronouncing the Japanese words. Given the limitations and students' answers, in order to get an expected effect, a better way to perform the right shadowing practice in normal classrooms with many students should be explored. Since students are not aware of the nature of each practice and how both practices showed improvement, implementing the first couple of times of repeating and the rest of shadowing practice may be considered as mixed practice. Also, it is hard to create a "real" shadowing practice setting with audio devices since the practice is performed as one activity during class. However, since the purpose of the study is to implement the shadowing practice in a standard classroom setting, further study should be focused on modifying the shadowing practice to a form suitable to carry on as a standard classroom activity. For valid results, we also suggest that a control group should be included in the research to afford more clarity in the comparison of results.

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