

## Leigh McDowell

Temple University,  
Japan Campus

# L1 use in instructions for low-level learners

### Keywords

task instructions, L1 use, task performance, low-level proficiency, teenagers, high school, communicative language teaching

This study examined the effects of L1 use in instructions for low-level proficiency, senior high school students. The following three treatments were given to participants in an independent groups study: (a) all English instructions, (b) English before Japanese instructions, and (c) Japanese before English instructions. Task performance and rating of understanding were measured. One-way ANOVA showed a significant difference in both task performance and rating of understanding for groups receiving L1 support compared to those receiving all English instructions. No significant difference was found between the English before Japanese pattern and the Japanese before English pattern. Additionally, the participants were surveyed for their preferences for L1 use in instructions. A clear majority (89.68%) preferred some form of L1 support.

この研究においては、英語熟達度の低い高校生を被験者として言語タスクを行わせる時に、日本語を補助的に使用した場合の効果进行分析した。それぞれ別のグループに対して、3種類の異なったパターンによる指導（a. 英語のみを使用、b. 英語を使用した後、日本語を使用、c. 日本語を使用した後、英語を使用）を行い、その課題達成度と理解度を測定した。一元配置分散分析（one-way ANOVA）によると、指導がすべて英語でなされたa.のグループに比べて、日本語が補助的に使用されたb.、c.のグループに、課題達成度や理解度において顕著な差異が見られた。なお、b.とc.のように日本語使用と英語使用の順序を変えても、その結果に顕著な差異は見られなかった。また、日本語を使用した指導の是非について被験者に調査をした結果、彼らの過半数（89.68%）が、何らかの形で日本語のサポートを好んでいるという結果を得た。

**T**HE role of students' first language (L1) in the field of English as a foreign language (EFL) remains a contentious issue. Here in Japan it is no exception. Views regarding the use of L1 in EFL classrooms vary as much as the classrooms themselves. All are no doubt shaped by and often unique to the settings in which they belong. While few would disagree with the principle that English (L2) needs to be maximized in EFL classrooms, there is research showing that in monolingual contexts like Japan, students' L1 can be a valuable resource for language learning (Burden, 2000; Cole, 1998; Weschler, 1997).

It has long been known that L1 use can be of particular benefit to teenage learners (Atkinson, 1993) but a lot of the research that has been done here in Japan looking at L1 use has been concerned with students at the university level (Burden, 2000, 2001; Cole, 1998; Critchley, 1999; Stephens, 2006; Weschler, 1997). This study shifts the focus to senior high school, where research is clearly needed on ways to increase the effectiveness of English language teaching for low-level proficiency, teenage learners.

Von Dietze and von Dietze (2007) looked at approaches to L1 use in EFL classrooms and found helping students understand instructions to be one area particularly appropriate for L1 support. Similarly, Critchley (1999) looked at what Japanese university students want from their teachers in terms of L1 support in class and found most wanting support in pedagogical activities such as instructions. The purpose of this study was to further the investigation of the use of students' L1, specifically for oral instructions.

The effects of three patterns of L1 use for instructions were investigated. The three patterns were: (a) all English instructions, (b) English before Japanese instructions, and (c) Japanese before English instructions. Effects of the three patterns were measured in two ways. The first was participants' performance on a task-based test. Results of this test depended to a large extent on understanding the oral instructions. The second was participants' ratings for understanding those instructions. In this study, the statistical model, Analysis of Variance (ANOVA) was used to investigate whether one of the three patterns was more effective than another.

A second aim of the study was to investigate participants' preferences for L1 use in instructions. A survey was conducted asking the participants to choose the pattern of instructions they preferred from the following five patterns: (a) all English instructions, (b) English before Japanese instructions, (c) Japanese before English instructions, (d) all Japanese instructions, and (e) no preference.

To meet the aims of this study the following research questions were investigated:

1. Is there a systematic difference in participants' performance on the task-based test between the three patterns of L1 use?
2. Is there a systematic difference in participants' ratings of understanding instructions between the three patterns of L1 use?
3. Do participants have a preference for a particular pattern of L1 use in oral instructions?

## Method

### Participants

A total of 223 participants in 12 classes were taken from 381 1st-year senior high school students in one Japanese private senior high school (sampling details given in Procedures). There were 155 males and 68 females. The participants were all 15 to 16 years old, from a middle-class background, were taking the mandatory Oral Communication 1 course (OC1), and could be described as low proficiency learners.

### Materials

A task-based test was developed specifically for this study (see Appendix A). The test was made up of four tasks. Each task was taken from the textbook that participants used in their OC1 lessons. The tasks were modified so that they were slightly different to what had been done in class. They were purposefully made more dependent on instruction. All instructions were given orally and not written. The raw scores from this test, on an interval scale, formed one of the two dependent variables in the study (here on referred to as task performance).

Instructions for the task-based test were administered according to a script so that all groups received the same set of instructions, differing only in the pattern of L1 use prescribed in the treatment. The script (Appendix B) was first developed in English and translated, with the help of native speakers, into Japanese. The script and task-based test were piloted with two separate groups before being utilized in the study.

A survey was also developed specifically for this study (Appendix C). The survey consisted of

three items. The first was a distracter. The second asked participants to rate their understanding of the instructions on the task-based test from 0 to 100%. Results from this item, on a ratio scale of 0 to 100, formed the second dependent variable in the study (here on referred to as rating of understanding). The third item asked participants to circle the pattern of L1 use they preferred for instructions in their OC1 classes.

The survey was developed in English, and with the aid of native Japanese speakers, translated into the participants' L1. Only the Japanese version was given to participants. The results of the survey were numerical and did not require any back-translation.

### Procedures

An independent groups test was conducted with twelve separate classes. Each class received one of the three treatments for instructions as listed in Table 1. These treatments (T1, T2, and T3), on a three level nominal scale, formed the independent variable in the study.

**Table 1. Three treatment groups representing three patterns of L1 use**

T1	T2	T3
All English instructions	English followed by Japanese instructions	Japanese followed by English instructions

The 12 classes in this study were intact classes from two different streams within the 1st-year level. Students' placement into these streams at the beginning of the school year is based on academic focus and splits students into two levels of academic proficiency. Treatments were allocated randomly to six groups in the lower stream (groups B1, B2, C1, C2, D1, & D2) and six groups in the higher stream (groups E1, E2, F1, F2, G1, & G2) so that there were an equal number of treatments distributed among the two streams (see Table 2).

The task performance test was administered once to each of the twelve classes. The test fitted into participants' regular OC1 lessons as a review of content previously covered in the course. That is, the participants had already learned the vocabulary and grammatical forms needed to complete the tasks successfully. In this way, it was hoped that reaction to the instructions would be more apparent than reaction to content.

**Table 2. Random sampling of the three treatments to the 12 independent groups**

T1	T2	T3
C2(19)	B2(17)	B1(20)
D2(18)	D1(18)	C1(17)
E1(20)	F2(19)	E2(18)
F1(19)	G1(18)	G2(20)
( <i>n</i> = 76)	( <i>n</i> = 72)	( <i>n</i> = 75)

Note. Number of participants in groups given in parenthesis

All four tasks on the test were typical OC1 tasks with the exception that there was no interaction and no written instructions. All instructions were administered verbally utilizing the pattern prescribed by the treatment. Interaction was excluded to meet the assumption of independence, a requirement of the statistical model utilized in this study. Typically, OC1 tasks involve students interacting with a spoken component. On this test, the spoken component came only from the teacher's instructions.

The survey was administered immediately following completion of the task-based test. Here participants were asked to rate their understanding of instructions on the test. Then on question three, participants were given the chance to choose the pattern of L1 use that they preferred for instructions in their OC1 classes.

### Analysis

The alpha level for the experiment was set at  $\alpha < .05$ . One-way ANOVAs were performed on each of the two dependent variables: task performance and rating for understanding. The Bonferroni adjust-

ment was applied to account for using two ANOVAs in the one independent groups test. Post hoc Scheffé and LSD tests were used to identify significant differences within the groups. Box's test was applied for the assumption of equal variance.

### Results

Results shown in the descriptive statistics (Table 3) indicate that mean task performance scores for English before Japanese instructions (T2) and Japanese before English instructions (T3) were similar to each other but both different to the all English instructions pattern (T1). A similar effect is evident for rating of understanding.

**Table 3. Descriptive statistics**

	Task performance			Rating of understanding		
	T1	T2	T3	T1	T2	T3
<i>n</i>	76	71	76	76	71	76
<i>M</i>	8.51	14.72	15.26	39.08	51.56	58.80
<i>SD</i>	4.77	5.26	3.79	24.57	28.89	24.29
Min	0	2	4	0	0	0
Max	19	23	23	95	100	100

Table 4 presents results from one-way ANOVA on the dependent variable, task performance. Table 5 shows the one-way ANOVA for the other dependent variable, rating of understanding. These results show that there was indeed a significant difference in means among the treatment groups for both task performance and rating of understanding. Box's test of equality of covariance confirmed the assumption

**Table 4. Results of one-way ANOVA for task performance**

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i> <sub>obs</sub>	<i>p</i>	Partial $\eta^2$	Power
Between groups							
Task performance	2119.00	2	1059.50	49.36*	0.00	0.31	1.00
Error							
Task performance	4722.09	220	21.46				
Total							
Task performance	43316.00	223					

\* $p < .05 \div 2$  for the Bonferroni adjustment

**Table 5. Results of one-way ANOVA for rating of understanding**

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i> <sub>obs</sub>	<i>p</i>	Partial $\eta^2$	Power
Between groups							
Rating of understanding	15115.76	2	7557.88	11.24*	0.00	0.09	0.99
Error							
Rating of understanding	147971.03	220	672.60				
Total							
Rating of understanding	715598.00	223					

\* $p < .05 \div 2$  for the Bonferroni adjustment

of equal variance was met.

Post hoc Scheffé and LSD tests both indicated that T1 was significantly different from T2 and T3 for both task performance and rating of understanding. However, no significant difference was evident between T2 and T3 for either task performance or rating of understanding.

Table 6 presents results from the survey of participants' preferences for L1 use. The English before Japanese instructions pattern was by far the most frequently preferred pattern—double the next nearest preference, the all Japanese instructions pattern. Looking at the results in Table 6 it is clear that a vast majority of participants in this study prefer some form of L1 support for instructions.

**Table 6. Participants' preferences for patterns of L1 use in oral instructions**

Pattern of L1 use	Tally	%
All English	2	0.9
English before Japanese	95	42.6
Japanese before English	46	20.6
All Japanese	59	26.5
No preference	21	9.4
Total	223	100.0

## Discussion

Results from this study show that groups receiving L1 support in instructions performed significantly better than those who received all English instructions. The order in which the L1 instructions were presented had no significant effect on task performance. Similarly, groups receiving L1 support rated their under-

standing significantly better than those who received all English instructions. Again, no significant difference was found for the order in which the L1 instructions were presented. These results suggest that offering L1 support for low-level proficiency high school students might be one way to help them understand and perform better on tasks and brings into question the all English approach for this type of learner. By utilizing students' L1 for instructions, teachers might still be able to address the areas of meaning-focused input and fluency development.

## Meaning-focused input or fluency development?

One of the aims of this study was to determine if one pattern of L1 use in oral instructions was more effective than another. That is, if groups receiving treatments T2 and T3 performed or understood better than the other groups. Results indicated that for both task performance and rating of understanding, there was no significant difference between offering L1 instructions before or after the English instructions. This and the results of the survey present an interesting insight.

The pattern most frequently preferred in the survey was by far English before Japanese instructions. Teachers can use this along with the all English pattern to provide students with meaning-focused input. But this is not the only possible pattern. Participants in this study performed no better with this pattern and rated their understanding no better than the Japanese instructions before English pattern. This suggests that this pattern may also be worthy of consideration; particularly, in the area of fluency development for listening. By shifting to the Japanese before English instructions pattern, students already know the meaning before receiving the L2 instructions and so can be pushed to listen to the English instructions at a faster and more fluent

speed without concern for misunderstanding. If teachers in Japanese high schools feel that fluency for listening is not being developed well enough, utilizing the L1 before L2 pattern for instructions might be one way to address the issue.

### **All English approach?**

Results of the survey indicated that a clear majority (89.7%) preferred some form of L1 support for instructions, with only 2 out of a total of 223 participants choosing the all English instructions option. Weschler (1997) pointed out that there was confusion in Japan that modern communicative methods demand an all English approach and that this has led to the misapplication of English-only methods in learning situations where they do not belong. If high school is one of those situations, then results of this study suggest that application of students' L1 for instructions might be a more reasonable approach.

When conducting classes for low-level proficiency learners entirely in English, there is always a danger that in order to be understood, teachers might bend or contort their English to such a level where it is no longer natural. Then the point is somewhat lost. Application of students' L1 for instructions offers a way around this. When teachers are confident that students understand their instructions and know what they are required to do, teachers can then give English instructions which are as close to natural and authentic as possible. After continuous exposure to instructions given in this way, students are more likely to increase their listening comprehension of English.

### **All Japanese approach?**

Worth noting here is that a fourth pattern of L1 use exists, the all Japanese pattern. This pattern, commonly used in Japanese high schools, was investigated in the survey but not in the independent groups test. Obviously, students can be expected to understand and perform well with instructions given all in their native language, but giving instructions only in Japanese takes away one opportunity to boost L2 input. That is not to say that this pattern does not have its place—26.5% of the participants in this study chose the all Japanese instructions preference on the survey—but that place is at the opposite end of the all English extreme. L1 support for instructions might be one way to provide a stepping stone for students to get from the one extreme to the other.

### **Conclusion**

Results from this study suggest that if teachers of low-level proficiency learners in high school English classes

in Japan are looking for ways to increase their students' performance and understanding of tasks, they would do well to consider L1 support for instructions. In spite of good intentions to use all English, the students' L1 is there with them in the classroom and so offers itself as a valuable resource for language learning. The first year senior high school students in this study indicated that they preferred the use of that resource.

### **References**

- Atkinson, D. (1993). *Teaching monolingual classes*. London: Longman.
- Burden, P. (2000). The use of students' mother tongue in monolingual English conversation classes at Japanese universities. *The Language Teacher*, 24(6), 5-11.
- Burden, P. (2001). When do native English speaking teachers and Japanese college students disagree about the use of Japanese in the English conversation classroom? *The Language Teacher*, 25(4), 5-9.
- Cole, S. (1998). The use of L1 in communicative English classrooms. *The Language Teacher*, 22(12), 11-13.
- Critchley, M. (1999). Bilingual support in English classes in Japan: A survey of student opinions of L1 use by foreign teachers. *The Language Teacher*, 23(9), 10-13.
- Stephens, M. (2006). The use and abuse of Japanese in the university English class. *The Language Teacher*, 30(8), 13-18.
- Von Dietze, A. & von Dietze, H. (2007). Approaches to L1 use in the EFL classroom. *The Language Teacher*, 31(8), 7-10.
- Weschler, R. (1997). Uses of Japanese (L1) in the English classroom. *The Internet TESL Journal*, 3(11). Retrieved from <iteslj.org/Articles/Weschler-UsingL1.html>

### **Appendices**

The appendices for this article can be downloaded from <jalt-publications.org/tlt/resources/2009/0906a.pdf>.

**Leigh McDowell** has been teaching and learning in Japan for 9 years. The first 5 he worked in a private language school and was exposed to a wide variety of students. For 4 years he has been teaching senior high school in Nara Prefecture. He is studying in the Master's Program at Temple University, Japan Campus. His current research focus is examining ways of increasing the effectiveness of communicative language teaching in high schools in Japan.



# L1 use in instructions for low-level learners

Leigh McDowell, Temple University, Japan Campus

## Appendix A

### Task-based test

#### I

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

(a)



(b)



(c)



A \_\_\_\_\_

B \_\_\_\_\_

C \_\_\_\_\_

#### II

	Wednesday	Thursday
First Period 8:40—9:30		
Second Period 9:40—10:30	English	Japanese language
Third Period 10:40—11:30		
Fourth Period 11:40—12:30		

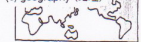
(a) math (数学)



(b) biology (生物)



(c) geography (地理)



(d) P.E. (体育)



(e) music (音楽)



#### III

Aki: What time do you usually get up in the morning?

Tom: I get up at (a) \_\_\_\_\_. After I jog, I take a shower. I have breakfast about (b) \_\_\_\_\_.

Aki: School starts at (c) \_\_\_\_\_. What time do you leave home?

Tom: About eight. I get to school around (d) \_\_\_\_\_.

(a) \_\_\_\_\_

(b) \_\_\_\_\_

(c) \_\_\_\_\_

(d) \_\_\_\_\_

#### IV

First



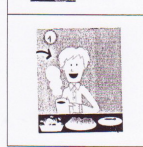
Second



Third



Fourth



## Appendix B

### *Scripts for instructions used in task-based test*

#### **Treatment 1 - All English Instructions**

I'll say the instructions only once so please listen carefully.

**Question I**, 1, 2 and 3 are dictation questions.

- I will say 3 questions. Please listen and write the questions.
- Now (a) (b) and (c), match with questions 1, 2 and 3 above. Write the number above the appropriate picture.
- Okay, next capital A, B and C, in English sentences write the answers to the above questions (a), (b) and (c). Write your answers in words, not numbers

#### **Question II**

- This is one class' schedule for Wednesday and Thursday. Here are 5 subjects. Please listen and write the names of the subjects, not the letters but the actual words, in the appropriate periods.
- Please turn over the page.

#### **Question III**

- Now you are going to hear a conversation between Tom and Aki. Listen and fill in the times. Write the answers in numbers, not words on the lines below the conversation.
- You will hear the conversation two times.

#### **Last question IV.**

- You will hear Tom's schedule. Draw a line and match the activities in the pictures with the order in which you hear them.

#### **Treatment 2 - English Instructions before Japanese**

I'll say the instructions only once so please listen carefully. 今からテストの方法を 1 回だけ説明します。静かに聞いてください。

**Question I**, 1, 2 and 3 are dictation questions. 質問I の 1 から 3 までは、聞き取りです。

- I will say 3 questions. Please listen and write the questions. 今から、質問を 3 問出します。質問を聞いて書いてください。
- Now (a) (b) and (c), match with questions 1, 2 and 3 above. Write the number above the appropriate picture. a から c までの絵を見て、1 から 3 までの質問に合うものを下線部に番号を書き

なさい。

- Okay, next capital A, B and C, in English sentences write the answers to the above questions (a), (b) and (c). Please write your answers in words, not numbers. 次に大文字のAからBまでの問題を行います。上の小さいaからbまでの質問に対する答えを英語でこたえなさい。答えは、数字ではなく、単語で書きなさい。

#### **Question II**

- This is one class' schedule for Wednesday and Thursday. Here are 5 subjects. Please listen and write the names of the subjects, not the letters but the actual words, in the appropriate periods. 質問IIです。あるクラスの水と木曜日のスケジュールの一部です。2 時間目に水曜日は、英語、木曜日は、日本語が入っています。その他のあいている所に、今から話すことを聞いて、右の欄から適切な科目をえらび、科目名を入れなさい(記号ではありません)。
- Please turn over the page. 裏側に続き

#### **Question III**

- Now you are going to hear a conversation between Tom and Aki. Listen and fill in the times. Write the answers in numbers, not words on the lines below the conversation. You will hear the conversation two times. 質問IIIです。次にトムとアキの会話についての問題です。会話を聞いて、a から d までの下線部に時間を入れなさい。答えは、単語ではなく、数字で書きなさい。

#### **Last question IV.**

- You will hear Tom's schedule. Draw a line and match the activities in the pictures with the order in which you hear them. 最後の質問IVです。次の問題は、トムのスケジュールについてです。聞こえた順番に線で結びなさい。

#### **Treatment 3 - Japanese Instructions before English**

As for Treatment 2 but in reverse, with Japanese instructions before English.

## Appendix C

### Survey

Rating of Understanding and Preference for L1 Use  
Survey in English and Japanese

### Survey

1. How well do you think you understood the questions on test? Example: 73%
  - 0% = Didn't understand them at all.
  - 100% = Understood them completely.
2. How well did you understand the teacher's spoken instructions for this test?
  - 0% = Didn't understand the instructions at all.
  - 100% = Understood the instructions completely.
3. For spoken instructions in O.C.1, which language pattern do you prefer? Choose from below by circling the one you prefer.

### アンケート

1. 今回のテストの出来は、どうでしたか?例: 73%
  - 0% = 全くできなかった。
  - 100% = 大変よく出来た。
2. このテストは、質問の説明が口頭でなされましたが、どれぐらい理解できました?
  - 0% = 全く理解できなかった。
  - 100% = 完全に理解できた。
3. O.C.1のLL教室の授業では、どの言葉での指示が分かりやすいと思いますか?下から、一つ選んでください。

どちらでもよい=日本語、英語の順英語、日本語の順全て英語